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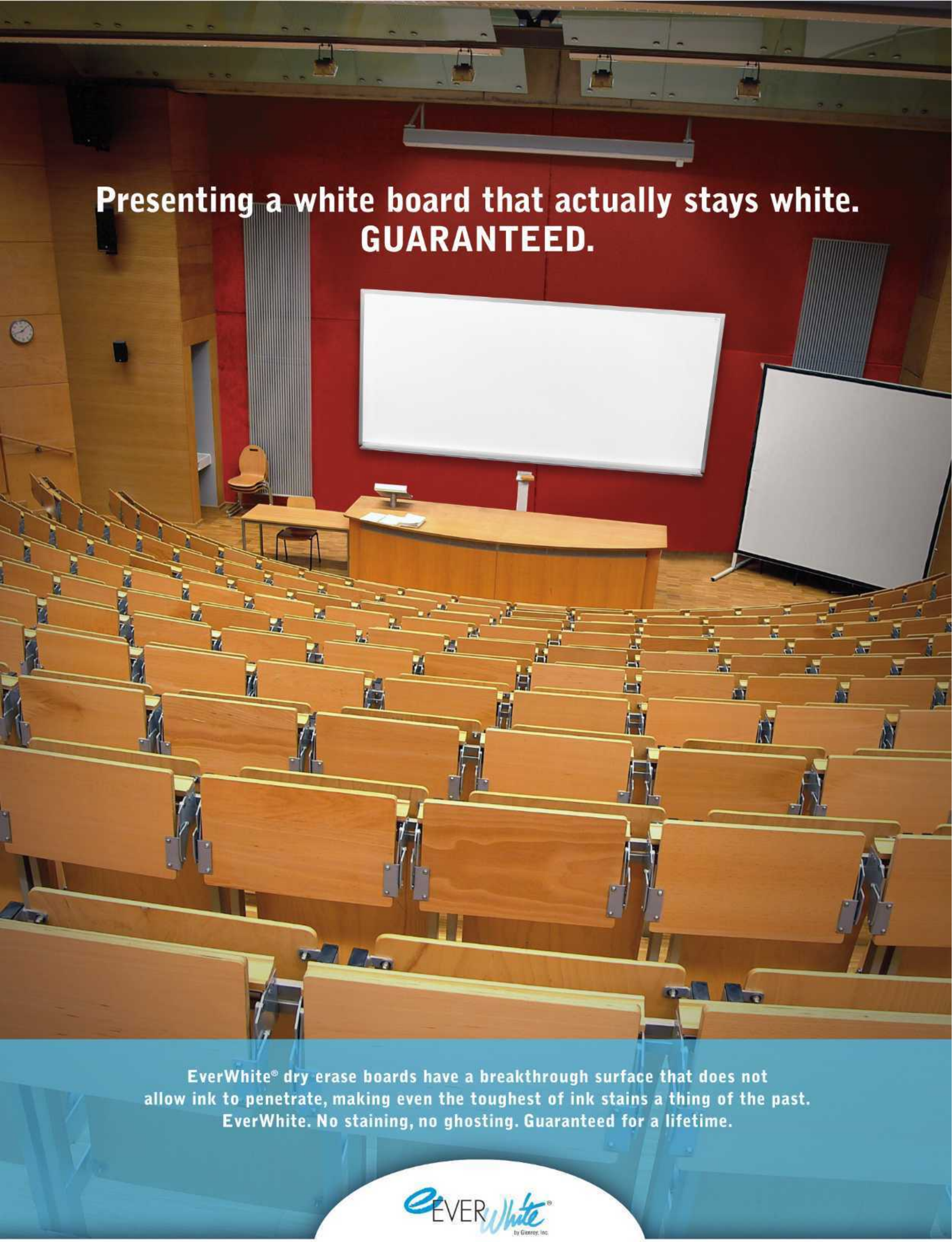
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architectural portfolio 2008

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SPECIAL SECTION: Green Field Notes


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VOLUME 81 • NOVEMBER 2008 • NUMBER 3

CONTENTS

DEPARTMENTS

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On the Cover: Lourdes College, McAlear Hall and Delp Hall, Sylvania, Ohio
Architect: The Collaborative Inc.
Photographer: Justin Maconochie

Save the dates

AS&U announces entry dates for the 2009 Educational Interiors Showcase and Architectural Portfolio. Mark your calendars, and make plans to include your best projects next year. **EIS 2009** entry forms are due March 4; portfolios are due April 3. **AP 2009** entry forms are due June 3; portfolios are due July 3.



William W. Caudill Citation p. 16



Louis I. Kahn Citation p. 18

Design Sparks



Did this year's presidential election drain your brain? Were you secretly wishing you would lose your Internet connection, lose power to your television and have your newspaper delivery guy forget where you live—just so you wouldn't have to hear any more political ads? Or are you one of those people who couldn't get enough of the analysis, the comparisons, the history, the predictions?

One thing we all can agree on is that people actually got excited about this year's election. There was an infectious energy in the air, and it was refreshing. And even if the map was a little more "blue" than you would have liked, you have to admit that bringing a little hope back into politics could change the attitudes and processes in Washington D.C. and beyond.

The issue in your hands represents another kind of energy and excitement: the new education facilities springing up on campuses across the country, and the projects that revitalize and refresh school and university landscapes.

The excitement of the main winners calls out from the pages. The Caudill winner, Rosa Parks School and Community Campus at New Columbia, transformed its Portland, Ore., community. The Kahn winner, a renovation of Norwich University's Wise Campus Center, created a campus living room to bring together the Northfield, Vt., campus community. And the special citation went to Richardsville Elementary School: Can you say "net zero energy"? Doesn't the idea of a school producing the same amount it uses on an annual basis inspire and excite you as you think about your own campus?

Speaking of energy, you can meet our jury on p. 10. Bill Bradley, Lisa Johnson, David Perkins, Dennis Randolph and Todd Rappold: Thank you for your time and tireless service in choosing inspiring designs.

If you are planning a new facility, renovating an existing one or just dreaming of the future, hopefully you will find something in this issue to get excited about. ■



slustig@asumag.com

WEB 101

Speaking of elections

A recent question from Schoolhouse Beat: The Blog: In the current climate of anxiety and uncertainty, is this a good time for schools and universities to be making large expenditures on construction, even if voters have authorized the spending?

Some of your comments:

• "The answer would be an absolute yes in higher ed to continue building. It is a wonderful way to provide economic stimulus."

• "Schools and universities should spend their money prudently, but if they have funding available and their facility needs are real, they should do what is best for their institutions and continue with those projects."

• "Those responsible for prudent financial management should continue to build and prepare facilities in keeping with a long-range view and not hunker down even in the face of some constituent concerns. They should also realize that energizing building projects that are funded encourages economic growth in their communities."

To read more comments (or add your own), visit http://blog.asumag.com/schoolhouse_beat.—*Susan Lustig*



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The 2008 Architectural Portfolio jury: Rappold, Perkins, Bradley, Randolph and Johnson.

Bill Bradley, AIA, LEED, REFP

Vice President, SHW Group, Charlottesville, Va.

Bill manages SHW Group's new Charlottesville, Va., studio, which is dedicated to pursuing the Living Building Challenge. Before returning to private practice, he was an assistant professor of education at the University of Virginia, where he helped direct an interdisciplinary research initiative examining educational best practices in light of advances in multiple fields. Through his understanding of the relationships among education, architecture and sustainable technologies, he works with leaders in education to foster better learning environments.

Bill is president of the Virginia chapter of the Council of Educational Facility Planners, International (CEFPI) and an active member of the American Institute of Architects' Committee on Architecture for Education (AIA-CAE).

Lisa K. Johnson, AIA, NCARB, LEED AP

Principal, Principal of Higher Education Design, DLR Group, Seattle

Lisa has 15 years of education design leadership experience. Throughout her career, she has focused primarily on the planning and design of K-12 and higher-education facilities for public and private clients. She has a bachelor of architecture degree from Carnegie Mellon University, Pittsburgh, and is active in DLR Group's national Higher Education Forum, where she shares her passion for creating inspiring learning environments. Lisa helped create and strongly advocates a highly collaborative and interactive planning process that analyzes challenges and responds to the goals, aspirations and needs of stakeholders.

Lisa is a member of the Cascadia branch of the U.S. Green Building Council, the AIA-CAE, the Society of College and University Planners (SCUP), CEFPI, and the Association for Women in Architecture (AWA).

David Perkins

Assistant Physical Plant Director, Maryville College, Maryville, Tenn.

David has worked with Maryville College for eight years. During this time, the college has undergone nearly $36 million in renovations and $67 million in new construction. He has been involved with bringing in and overseeing the college's green-cleaning and recycling programs, and standardizing facility materials.

David is a member of the Association of Higher Education Facilities Officers (APPA) and the Tennessee Independent Colleges and Universities Association (TICUA), and is a TICUA EPA peer auditor.

Dennis J. Randolph

Physical Plant Manager, Roseburg Public Schools, Roseburg, Ore.

Dennis has been involved with public school facility management for more than 23 years. He was the director of facilities for Selah (Wash.) School District for more than 18 years, the director of maintenance and operations for Yakima (Wash.) School District for 2½ years, and has been the physical plant manager for Roseburg (Ore.) Public Schools since 2007.

Dennis is former president of the Washington Association of Maintenance and Operations Administrators and the National School Plant Management Association (NSPMA). He is an Educational Facilities Master, a Certified Playground Safety Inspector, and an Asbestos Inspector and Management Planner. He also has served on committees for the Washington Association of School Administrators, the Washington Association of School Business Officials and the Washington State Energy Office.

Todd Rappold

Superintendent, Miami East Local Schools, Miami County, Ohio

Todd has been a superintendent for this rural Ohio school district for five years. He has 18 years of prior experience as a building administrator, teacher, athletic director and coach.

Todd coordinated the construction of a 165,000-square-foot middle school in Sidney, Ohio; facilitated the completion of a 160,000-sqaure-foot elementary and junior high school project; and is beginning the planning and design phase for a new high school. He has a bachelor's degree from Bowling Green State University, Bowling Green, Ohio; a master's degree from Wright State University, Dayton, Ohio; and is enrolled in the doctoral program at the University of Dayton, Ohio.

He has received the Ohio Association of Elementary School Administrators' hall of fame school award. He was chosen for an exemplary employee award in the Springfield City School District, Springfield, Ohio.

The Making of Champions

Who's who in education design? That's the question that jury members sought to answer as they reviewed 252 examples of school and university design for *American School & University*'s 2008 Architectural Portfolio competition. The five-member jury traveled from their home states of Florida, Oregon, Tennessee, Virginia and Washington to convene in Overland Park, Kan., for two days and deliberate what qualities yield champion designs for education facilities. Among their considerations:

Is it a great space for learning?
- Fits program.
- Stimulates senses.
- Fosters educational community.
- Inspires occupants.

Is it multifaceted?
- Quality and efficiency.
- Community use, civic functions, town/gown, student life.
- Adaptability.

How does it accommodate technology?
- Building automation.
- Learning tools.

Is it well-designed?
- An inviting environment.
- Relationship to context.
- Clear diagram.
- Interior/exterior connection.
- Visibility.
- Safe and secure; visual openness/auditory privacy.
- Appropriate scale/ergonomics.
- Building as a learning tool.

Is it sustainable and maintainable?
- Stewardship of finite resources.
- Holistic/integrate design that permeates.
- Understanding cost of ownership.
- Elemental/Compulsories.
- Independently verified.

William S. Bradley

Lisa K. Johnson

David S. Perkins

Dennis J. Randolph

Todd Rappold

"Appropriate interpretation of the existing campus context—with a twist. An abundance of controlled natural light and sensitive use of materials."
p. 18

"A previously undistinguished older building with new life. The exterior encourages learning. Good urban context and indoor/outdoor connection."
p. 24

"Judicious use of materials in key areas. Good integration of learning spaces. We like the use of material and the inside/outside connections."
p. 75

"Nice focus on arts and learning. Great site context of residential sensitivity on one side, and a very public performance and prefunction area on the other."
p. 225


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MAIN WINNERS

WILLIAM W. CAUDILL CITATION

Dull Olson Weekes Architects
Rosa Parks School and Community Campus at New Columbia
Portland, Oregon .... p. 16-17

"The community connection and neighborhood transformation launch this school clearly to the top."

—2008 Jury



LOUIS I. KAHN CITATION

Perry Dean Rogers | Partners Architects
Norwich University, Wise Campus Center
Northfield, Vermont .... p. 18-19

"Appropriate interpretation of the existing campus context—with a twist. An abundance of controlled natural light and sensitive use of materials."

—2008 Jury



Visit SchoolDesigns.com.

SPECIAL CITATION





Sherman Carter Barnhart
Richardsville Elementary School
Bowling Green, Kentucky .... p. 20

"We applaud the leadership and commitment to pursue a net-zero-energy school facility."

—2008 Jury

Rosa Parks School and Community Campus at New Columbia
Portland, Oregon



Dull Olson Weekes Architects
Design team: John Weekes, Karina Ruiz, Mathew Braun, Barry Deister, Brian Greenwood, Thea Wayburn
Client: N4C-New Columbia Community Campus Corporation; Vicki Phillips, Superintendent
Capacity: 550
Space/student: 122 sq. ft.
Area: 66,863 sq. ft.
Total cost: $12,734,031
Cost/square foot: $190.45
Completion: September 2006
Photographers: Gary Wilson Photo/Graphic; Dull Olson Weekes Architects

The Community Campus at New Columbia is a mixed-use partnership project situated in the recently redeveloped New Columbia low-income housing project. Projecting a significant increase in population in an established North Portland neighborhood, New Columbia brought an increased need for educational, community, family and youth support programs; therefore, the Community Campus at New Columbia was conceived. A public/private partnership, it includes a new K to 6 school (Rosa Parks), Boys & Girls Club, and Portland Parks Community Center, on land donated by the Housing Authority of Portland.

The centerpiece of the Community Campus is the new Rosa Parks School. A sustainable school envisioned as a center of community, it is only the second new school designed and constructed by Portland Public Schools in 30 years. Focused on learning, the new school is divided into four neighborhoods, each containing 125 students. Each neighborhood contains five classrooms, a resource room, and support functions around a neighborhood commons. At the entry to the school, families are provided their own resource room, as well as access to an information center. Functions including art, computers, music and food service are shared with the new Boys & Girls Club.

A walk-in school on a small site with only 1.8 usable acres, Rosa Parks recently was certified LEED gold.









"The community connection and neighborhood transformation clearly launch this school to the top."

—2008 Jury







Norwich University, Wise Campus Center
Northfield, Vermont



"Appropriate interpretation of the existing campus context—with a twist. An abundance of controlled natural light and sensitive use of materials."
—2008 Jury

Perry Dean Rogers | Partners Architects

Design team:
Martha Pilgreen, AIA, Principal-in-Charge; Ned Collier, AIA, Collaborative Principal; Rick Jones, AIA, LEED AP, Project Manager

Client:
Norwich University; David Magida, Chief Administrative Officer

Area:
71,425 sq. ft. (total): 24,594 sq. ft. (new); 46,831 sq. ft. (renovation)

Total cost:
$21,675,440

Cost/square foot:
$303

Completion:
September 2007

Photographer:
Richard Mandelkorn

Norwich University, the country's oldest private military school, shifted students from a campus in Montpelier to the Northfield Campus. The most important purpose of the project is to bring the distinct cultures together as a community, providing opportunities for social interaction and learning, and satisfying the university's desire for a "celebration of winter."

Harmon Hall is the existing campus center, accommodating dining, student services and administrative functions. Because Harmon Hall is situated at the public edge of the campus, the idea of a "campus living room" was developed into a narrative in which the building acts as a meeting place for disparate groups: cadets and civilians, staff, faculty and visitors. In terms of program and site, the building acts as a gateway to the school.

The renovation of Harmon Hall acknowledges and respects the historical language of the campus. The addition subtly acknowledges its modernity, while respecting its historical context. In contrast to the closed brick box of the existing building, the main volume of the addition is connected actively to its surroundings. It is a simple gesture, creating a large portal to the west and a more discreet opening to the south. The double-height dining spaces are enlivened by a "Winter Garden," connecting interior and exterior spaces, and creating a sense of warmth and temporality. Local materials such as Vermont slate sculping and brick were used on the exterior, along with pre-patinated copper and sustainably harvested wood.

Sustainable-design elements include aluminum louvers that reduce solar heat gain, minimize high summer sun and allow in low winter sun; TPO white roofing material; a pulper to reduce water use by separating solid food waste from the water system; and additional control points in the MEP system for improved monitoring capabilities of the building systems.





Before









Before



"In essence, Norwich University put a major part of its future success in the hands of an architectural firm. What could have been a difficult process was instead an exciting team effort. The firm deserves credit for actively listening, and for developing designs that yielded a profound sense of pride and enthusiasm for Norwich University."

—David Magida, Chief Administrative Officer





Richardsville Elementary School
Bowling Green, Kentucky





Sherman Carter Barnhart

Design team: Philip C. Gayhart, AIA; Kenny Stanfield, AIA; Justin McElfresh; Brandon Roberts; Brantley Adams	
Client: Warren County Board of Education; Dale Brown, Superintendent	
Capacity: 600	**Area:** 82,000 sq. ft.
Total cost: $14.4 million	**Cost/square foot:** $175.61
Completion: August 2010	



Warren County Schools has four Energy Star buildings. As a net-zero school, Richardsville Elementary is designed to use only 18 kBtu/sq. ft.—annually 75 percent less than the ASHRAE 90.1 design standard for elementary schools.

The school is designed to be the first net-zero-energy school in Kentucky. Net zero means the school will produce the same amount of energy it uses on an annual basis. To achieve net zero, the design focused on six key aspects:

- High-performance building envelope.
- Daylighting.
- Geothermal HVAC and hot-water generation.
- On-site solar panel array.
- Energy Star-rated kitchen.
- Efficient operation and maintenance plan.

A clerestory connects the school and daylights interior spaces of the gymnasium, media center and cafeteria. Clerestory light shelves and skylights provide active daylighting for classrooms. Themed portions of the school are used to make the building a green teaching tool.

A "geothermal hallway" exposes piping manifolds and includes a temperature gauge so students can monitor the system's performance.

The "solar hallway" has a laptop computer battery-charging station where students can see the energy being received from the solar panels.

The "water conservation hallway" enables students to monitor the amount of rainwater collected and used to flush toilets throughout the school.

The "recycling hallway" enables students to monitor the quantities of materials collected and relates these to their global impact.



"We applaud the leadership and commitment to pursue a net-zero-energy school facility."

—2008 Jury



Daylighting section

PRE-K/EARLY CHILDHOOD

CITATIONS

DCM Architecture & Engineering LLC
Augusta Kindergarten School
Irvington, New Jersey .... p. 24

"A previously undistinguished older building with new life. The exterior encourages learning. Good urban context and indoor/outdoor connection."

—2008 Jury



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"Appropriately scaled for young children; innovative. Lots of daylighting and openness."

—2008 Jury



OUTSTANDING PRE-K/EARLY CHILDHOOD

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Visit SchoolDesigns.com.

Augusta Kindergarten School
Irvington, New Jersey









"A previously undistinguished older building with new life. The exterior encourages learning. Good urban context and indoor/ outdoor connection."

—2008 Jury

DCM Architecture & Engineering LLC

Client: Irvington Board of Education; Audrey Lassiter, Director of Early Childhood Services	
Area: 48,000 sq. ft.	**Total cost:** $10,080,000
Cost/square foot: $210	**Completion:** September 2007
Photographer: Bilyana Dimitrova Photography	

Part of a districtwide reconstruction program, an outdated structure built in 1917 was replaced with a state-of-the-art, 21st-century high-performance school. A portion of the original building was altered to accommodate a multipurpose room, and administrative and support spaces.

The addition includes 24 new self-contained classrooms and a new kitchen. The two-story school was designed to obtain LEED silver certification. It places particular emphasis on daylighting, incorporating the creative use of sun shades, light shelves, tubular skylights and dimmers. The use of color, primary shapes, textures and volume enables teachers to use the building as a learning tool. The learning garden serves as an outdoor classroom where inner-city students learn about gardening and horticulture. It is maintained by members of a local gardening club. The school has been embraced as a landmark, bringing a sense of community unity in an otherwise impersonal mega-urban environment.


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Brokaw Early Learning Center

Oswego, Illinois



DLR Group

Design team:
George Beach, AIA, LEED AP; Dennis Bane, AIA, LEED AP

Client:
Oswego Community Schools 308; David Behlow, Superintendent

Capacity:
600

Space/student:
66.33 sq. ft.

Area:
39,800 sq. ft.

Total cost:
$9,075,082

Cost/square foot:
$228.01

Completion:
September 2007

Photographer:
James Steinkamp

Brokaw Early Learning Center is designed to meet the needs of young children, many with learning or physical disabilities. The facility features four small houses that pinwheel around a central core of shared facilities. Each house consists of five classrooms surrounding a light-filled living room, serving as the hub of the instructional program. From a student's perspective, this reduces the scale of the school to just five classrooms and a living room. In-floor and ceiling heat provides thermal comfort in response to the activities on the classroom floor. The many attributes of the school give students a place where they, during the most critical development period of their lives, can learn how to learn—a trait necessary for life.

Undulating gable roofs allow natural light to penetrate 100 percent of all classrooms and more than 85 percent of the total building area. Additional windows are raised just off the floor so students of all abilities can connect with the outdoors. A child-friendly scale throughout the facility is created with horizontal lines through color, materials and texture.





"Appropriately scaled for young children; innovative. Lots of daylighting and openness."

—2008 Jury





Sacred Heart Early Childhood Center
Kingston, Massachusetts









Design Partnership of Cambridge

Design team: David Finney, AIA, LEED AP, Principal-in-Charge; Will Gerstmyer, AIA, LEED AP, Design Principal; Joseph Drown, AIA, Managing Principal; Jim Pitts, Job Captain/Construction Administrator; David Capaldo, AIA, LEED AP, Technical Lead	
Client: Sacred Heart Elementary School; Sister Ann Therese, Principal	
Capacity: 112	**Space/student:** 167 sq. ft.
Area: 18,642 sq. ft.	**Total cost:** $5,053,000
Cost/square foot: $271	**Completion:** August 2007
Photographer: Mark Rhodes Photography	

The natural beauty of the project site and meticulous maintenance of this independent school immediately kindled the creativity of the architect. The project's main goal was to create a building that is sensitive to the size of children. Everything within the building, from the stage in the cafetorium to the desks in the classrooms, is scaled for young children. The exterior of the building is meant to appear as if it is made entirely of children's blocks. Throughout, the interiors are similarly themed colorful accents and playful touches.

The center accommodates 112 children during the day and includes an auditorium that will hold up to 300 people. The Early Childhood Center extends the teaching values of the adjacent elementary school. These focus on providing an outstanding education, teaching responsibility, and providing a caring environment for each child.




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Collinsville Public Schools, Early Childhood Center

Collinsville, Oklahoma



The Stacy Group

Design team: Michael Stacy, Principal; Sean Willis, Studio Director; Bonnie Benefield, Project Manager; Allison Curran, Interiors Director		
Client: Collinsville Public Schools; Pat Herald, Superintendent		
Area: 28,400 sq. ft.	**Total cost:** $3,592,006	**Cost/square foot:** $126.48 (including site costs)
Completion: August 2007		**Photographer:** Imageworks Studio









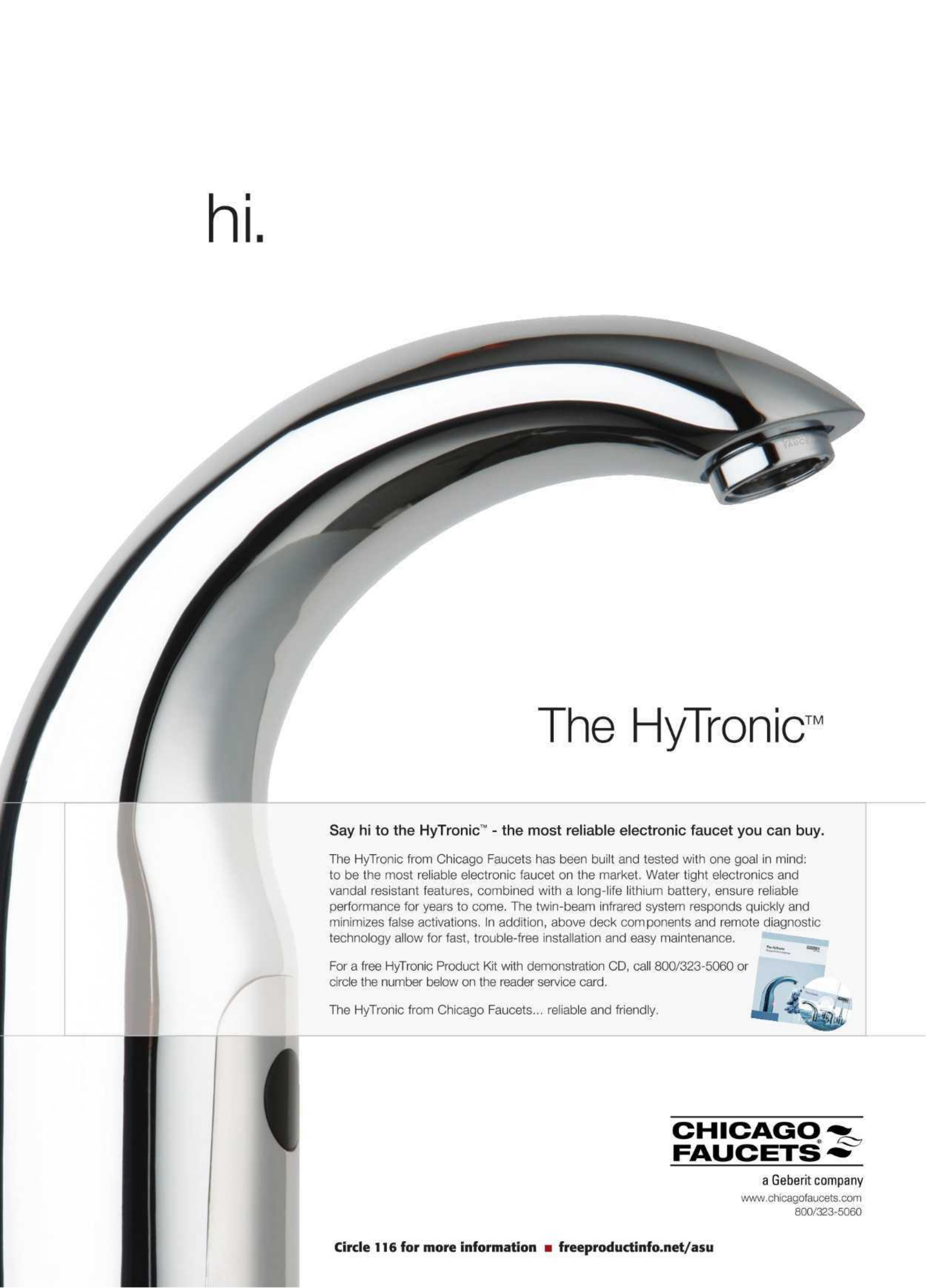
Collinsville Early Childhood Center's program was developed through a collaborative process that included school administrators, teachers, the community, architects and interior designers. It called for a 450-student facility that would maintain a sense of community and scale. The design develops the idea of a school-within-a-school. The scale of the spaces becomes more intimate as students enter each pod and ultimately their individual classrooms.

The design includes a secure vestibule that allows for controlled access into the building. All of the exterior entrances can be seen from three camera locations. Each pod can be locked from the interior and eliminate access from the main corridors. This allows for egress through the pod and away from intruders.

Energy efficiency and operating costs also were identified as high priorities. The design allows for daylighting in each area. The building also uses ground-source heat pumps, along with an energy-management-control system. For additional energy savings, motion sensors control lighting in common spaces throughout the building, and infrared systems control sinks and toilets.

Each pod has an outdoor classroom that allows for teaching "outside of the box." Administrators wanted to develop an area where students could be more hands-on with class projects and interact with nature. The outdoor classrooms extend beyond the building and are specific for each age group.

The design of the interior spaces incorporates colors, shapes and textures to help students and visitors navigate the building more easily. Because each "pod" has its own entrance and identity, students develop a sense of community and ownership that teachers then can use in the curriculum.


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ELEMENTARY SCHOOLS

CITATION

Cuningham Group Architecture, PA
Watertown-Mayer Elementary School
Watertown, Minnesota .... p. 36

"Nicely detailed and kid-friendly. Simple, cost-effective details. Inside/outside connection."

—2008 Jury



OUTSTANDING ELEMENTARY SCHOOLS

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Watertown-Mayer Elementary School
Watertown, Minnesota



Cuningham Group Architecture, PA

Design team:
Tim Dufault, AIA, LEED AP, Principal-in-Charge; Judith Hoskens, REFP, LEED AP, Project Manager; Paolo Lovagnini, LEED AP, Team Leader; Darryl Pratte, AIA, LEED AP, Senior Project Designer; Patricia Nieto, LEED AP, Project Designer; Cheryl Zehoski, CID, LEED AP, Interior Designer; Melissa Brewer, Interior Designer; Anderson-Johnson Associates, Inc., Civil Engineer; Clark Engineering Corporation, Structural Engineer; Karges-Faulconbridge, Inc., Mechanical/Electrical Engineer

Client:
Watertown-Mayer Public Schools (ISD 111); Karsten Anderson, Superintendent

Capacity: 600	**Space/student:** 135 sq. ft.
Area: 81,000 sq. ft.	
Total cost: $14,929,620 (includes building construction, site development, fixed equipment, technology)	
Cost/square foot: $184	**Completion:** September 2007
Photographer: Dana Wheelock	







"Nicely detailed and kid-friendly. Simple, cost-effective details. Inside/outside connection."
—2008 Jury



Designed to support the district's vision to provide flexible, adaptable and integrated learning while recognizing the identity and history of nearby communities, this school integrates innovative educational design with respect for the local community and environment.

The architect organized the school into neighborhoods to form small learning communities for grades 1 to 5. The flexible setting enables teachers to deliver instruction in a variety of ways. Learners are able to succeed based upon individual learning styles. The plan's openness and visibility enhance safety and security. The design also celebrates the surrounding landscape; each academic wing has its own identity (farmland, wetland, woodland, prairie).

Designed to achieve LEED silver certification, the facility uses sustainable design, including a geothermal well system, promoting water and energy efficiency, managing stormwater, and using regional materials and resources. Daylighting is provided to most of the learning spaces, and state-of-the-art, high-efficiency mechanical systems are used to bring fresh air into each classroom. Optimizing the energy performance of the building and its systems is projected to result in a 40-percent savings in energy costs.

Roesland Elementary School
Roeland Park, Kansas



ACI/Frangkiser Hutchens, Architects & Planners

Design team: Larry Diehl, Principal-in-Charge; Gary Phillips, Project Architect; Kim Sharkey-Weber, Sarah Anning, Interior Designers	
Client: Shawnee Mission USD 512; Marjorie Kaplan, Superintendent	
Capacity: 550	**Space/student:** 129 sq. ft.
Area: 71,200 sq. ft.	**Total cost:** $8,951,786; $599,467 (demolition)
Cost/square foot: $125.73	**Completion:** January 2008
Photographer: Michael Spillers	

Roesland Elementary School is situated in a neighborhood surrounded by homeowners. Because of the small size of the site and a significant cross slope on the property, a two-story design was the best use of the property for flow of traffic and supervision. The final design separates students into two age groups by floor; K to 3 are on the upper level and grades 4 to 6 are on the lower level. This arrangement helps in overall student discipline by minimizing opportunities for the older students to interact with the younger students.

This community and school is very nostalgic about its past; therefore, many elements from its history are incorporated into the design. An abandoned interurban railway ran along the south side of this site, so that design element was incorporated into the two-story library. Many shapes and silhouettes are integrated into the design to suggest a train station, such as an arched metal roof, clock over the control desk, street signs, and acoustical panels that mimic the front of a trolley car.

Also, some of the limestone spire and brick facade were salvaged from the old Roesland prior to demolition. These items were incorporated into the elevator shaft, which is in the main lobby on the first floor, thus creating ties to the past.

All classrooms have exterior windows and are equipped with overhead projectors connected to teaching stations and closed-circuit TVs for security/monitoring. Wayfinding was incorporated throughout the school with lines of VCT accent tiles and corridor banding colors that correlate to an accent wall in each classroom.

Overall, the project demonstrated its success by being popular and functional among the staff and administration.











Sunrise River Elementary School

North Branch, Minnesota









ATS&R Planners/Architects/Engineers

Associated firm: Clark Engineering

Design team:
Pat Hanauer, REFP, Educational Planner; Daniel C. Moll, AIA/CID/NCARB/LEED, Principal-in-Charge/Project Manager; Nancy LaBissoniere, AIA, Project Architect; James T. Lange, PE, Mechanical; Gaylen Melby, PE, Electrical; Terry Hochbein, RCDD/NTS/OSP Specialist, Technology

Client:
North Branch School District; Robert Stepaniak, Superintendent

Capacity:	Space/student:	Area:
1,000	135 sq. ft.	134,600 sq. ft.
Total cost:	**Cost/square foot:**	**Completion:**
$25 million	$185.74	June 2005

Photographer:
Rick Peters/InsideOut Studios

Program requirements were to create small, personalized learning communities within a large facility and to create a vital community resource.

A pinwheel design of three mixed-grade houses are situated around a media center. Mixed-grade houses provide flexibility for future changes in enrollment. Classrooms cluster around shared group-learning areas. Technology is integrated with document cameras, audio enhancement, LCD projectors, computer work stations, portable laptop labs and smart boards.

To plan for future changes in grade configurations, the classroom house design is easily adaptable for kindergarten use.

An entrance colonnade provides access to all public areas of the facility for community use, while also separating students from public access. After-hours secure zones invite community use of the cafeteria, gym, media center and meeting spaces.

Durable, low-maintenance terrazzo and burnished block were used throughout. Blue terrazzo borders the circulation areas, representing a "river" theme and the school's namesake. Classroom communities are distinguished by different color schemes, and soffits with signage label different spaces clearly.

To minimize energy consumption, automated lighting, occupancy sensors, variable-air-volume systems and daylighting were incorporated throughout.

Sustainable qualities, timeless design and efficiency make Sunrise River Elementary School a source of community pride.

George Washington Carver Community School and Ellis I. Levitt Boys and Girls Club · *Des Moines, Iowa*



BCDM
Design team: Alvine Engineering; Charles Saul Engineering; Taylor Ohde Kitchell
Client: Des Moines Public Schools; Bill Good, Chief Operating Officer
Capacity: 845
Space/student: 111 sq. ft.
Area: 93,855 sq. ft.
Total cost: $11,257,696
Cost/square foot: $119.95
Completion: August 2007
Photographer: Kessler Photography



Formed through the merger of two smaller elementary schools, both straining to serve students severely inhibited by socioeconomic burdens, George Washington Carver Community School was designed as a beacon of hope and a resource for success.

This partnership of Des Moines Public Schools, Iowa Health Systems, the Des Moines Parks and Recreation Department, and the Boys and Girls Club of Central Iowa supports and inspires the community. The joint-use facility educates those in pre-kindergarten through fifth-grade, while providing for the social needs of the neighborhood with a Boys and Girls Club, early-childhood center and Not-New Shop retail thrift store.

Situated on 10 acres adjacent to a city park, Carver Community School and Boys and Girls Club feature multiple age-appropriate playgrounds, outdoor classroom space and rain gardens.

Building-wide technology and green initiatives, such as a geothermal well field and heat-pump approach to heating and cooling, combine to make this 93,855-square-foot building state-of-the-art and energy efficient.





Chase Street Elementary School
Athens, Georgia



CDH Partners, Inc.

Design team:
Jeff Fincher, Principal-in-Charge; Brian O'Toole, Project Manager; John Benefield, Construction Administrator

Client:
Clarke County School District; Ted Gilbert, Associate Superintendent

Area:
69,000 sq. ft.

Total cost:
$8.4 million

Cost/square foot:
$121.74

Completion:
December 2007

Photographer:
Sabrina A. Carpenter/CDH Partners, Inc.











Chase Street School is a landmark in the Athens community. Situated in the historic Boulevard area, the school was built in 1922. The campus, rich in history, has been renovated and expanded to meet the needs of today's students and teachers.

Before beginning the much-needed update, the design team was challenged to tie the new construction with the original school while maintaining play areas large enough to support the student population. Designers renovated the existing building while maintaining the architectural significance and building details familiar to the community.

The renovated space houses the administrative staff and community-outreach events. An addition was designed to match the scale of the original building and surrounding neighborhood. The addition includes the core building, which houses the media center, cafeteria and gymnasium. This central space is positioned between two classroom wings. Elevations for each of the 12-classroom wings architecturally replicate familiar details from the 86-year-old campus, offering the best of old and new.



Princeton Elementary School
Lithonia, Georgia











CDH Partners, Inc.

Design team: Jeff Fincher, Principal-in-Charge; Tammy Benefield, Project Manager	
Client: DeKalb County School System; Patricia A. Pope, Chief Operations Officer	
Area: 102,000 sq. ft.	**Total cost:** $14,050,000
Cost/square foot: $137.75	**Completion:** August 2007
Photographer: Sabrina A. Carpenter/CDH Partners, Inc.	

Princeton Elementary School is situated on an L-shaped site of 10.25 acres with a 435-foot frontage.

The design of the new school consists of three major components. The central portion of the campus contains the core facilities shared by the entire school. These areas include the administration suite, cafeteria, media center and gymnasium. As a result of site analysis and budget constraints, the design team determined the optimum use of the site would allow the core facilities to be a single story in height with two, two-story classroom wings positioned on either end of the core.

A central two-story corridor connects the classroom wings to the core facilities. An upper-level mezzanine provides access to the classrooms on level 200, and stairs from level 200 to the main level are situated within this central axis. The exterior is brick and synthetic stucco.

Bow Lake Elementary School
SeaTac, Washington






Designed to consolidate two highly disparate schools into one, Bow Lake Elementary School blends student differences into a melting pot of educational opportunity. The school is home to the deaf and hard-of-hearing program, the highly capable (gifted) program and the English language learning center, representing 66 languages. The facility intermixes students seamlessly in four learning communities. Uniquely integrated, students are opened to an opportunity for curiosity and a world of perspective.

The two-story, 75,000-square-foot facility is organized to celebrate this diversity, allowing for interaction and shared experiences among all students. Each learning community is named for a different biome, accented by playful detailing, and sensitivity to color and scale. The building invites students to learn from the surrounding outdoor environment with operable, glass-like systems in each community, literally removing the line between indoors and outdoors.

In addition, the city of SeaTac sponsored a community room in the building, which benefits the community and students. Through landscaping, low-VOC materials, daylighting and use of natural energies, Bow Lake reflects the principles of energy-conscious design.

BLRB Architects, ps

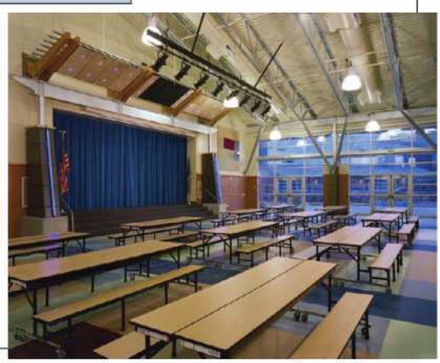
Design team:
Tom Bates, FAIA, Principal-in-Charge; John Wegener, AIA, Project Manager; Bob Lindstrom, AIA, Project Architect; Scott Hogman, Construction Administration; PCS Structural Solutions, Structural Engineer; Tres West Engineers, Mechanical/Electrical Engineer; AHBL Engineers, Inc., Civil Engineer; Thomas V. Rengstorf Associates, Landscape Architect

Client:
Highline Public Schools; John P. Welch, Superintendent

Capacity:	Space/student:	Area:
600	125 sq. ft.	74,980 sq. ft.
Total cost:	**Cost/square foot:**	**Completion:**
$20,498,000	$273	September 2007

Photographers:
Dan Tyrpak Photographic; Joe Manfredini





Churchill Center and School
St. Louis, Missouri



Christner Inc.

Design team:
Ted Christner, AIA, Principal-in-Charge; Bob Ducker, AIA, LEED, Designer; Todd Jacobs, AIA, LEED, Project Manager; Laurel Harrington, RLA, ASLA, Landscape Architect; Rick Wimmer-Brown, LEED, Project Architect; Chris Woodworth, Architectural Technician

Client:
Churchill Center and School; Sandra Gilligan, Director

Capacity:	Space/student:	Area:
120	400 sq. ft.	48,000 sq. ft.
Total cost:	**Cost/square foot:**	**Completion:**
$8,723,000	$182	June 2007

Photographers:
John Langholz/Christner Inc.; Alise O'Brien

Churchill is a highly acclaimed school specializing in helping children with learning disabilities. An intensive program of individualized education enables students to achieve and return to a traditional classroom. This replacement facility on an 11-acre site allows for a more suitable learning environment for students and more adequate training facilities for teachers. It also provides expanded athletic facilities.

To address the varying needs of students, multiple classroom types are required. Nine small classrooms (eight students per teacher) give students individualized attention, and three "transitional" classrooms (15 students per teacher) enable students to acclimate themselves to a more traditional classroom setting. One-on-one tutorial time is the heart of Churchill's program. Each student spends time daily on individualized curriculum in one of 19 light-filled, acoustically controlled tutorial rooms.

Faculty interaction and development are necessary for student success, so each educator is provided with a dedicated work space within the faculty work area. To avoid isolation and encourage interaction, small and large work areas are incorporated.

With the gym, library, classrooms and theater arranged around a two-story commons, the architecture reinterprets the Arts & Crafts style of the beloved existing school.







Evendale Elementary School
Cincinnati, Ohio



Cole + Russell Architects

Associated firm: Fanning Howey

Design team:
Thomas Lindsey, Education Design Group Director; Jeff Dodge, Project Manager; Christie Boron, Michael Boron, Beth Breda, Project Architects; Richard Baldwin, Construction Administration

Client:
Princeton City Schools; Fred Pensinger, Facilities Expansion Project Manager

Capacity:
280

Space/student:
198.625 sq. ft.

Area:
55,615 sq. ft.

Total cost:
$8.9 million

Cost/square foot:
$160.03

Completion:
August 2006

Photographer:
William Manning











This one-story structure is inspired by early Evendale School architecture with its sloped roofs and masonry exterior. The facility houses pre-K and kindergarten, grades 1 to 2, and grades 3 to 5 in independent learning communities. Students benefit from classrooms paired around small-group rooms used for special education, speech, special testing and other small-group instruction.

The school features a community room, two science rooms, a large playground and parking facilities, a separate pre-K and kindergarten playground, and a large learning center with reading space that faces an outdoor learning garden. The music room has direct access to an adjacent stage. The stage and cafeteria open into the gymnasium by means of a movable wall. The site design also features separate bus and parent dropoff and pickup zones, which improves site circulation and safety.

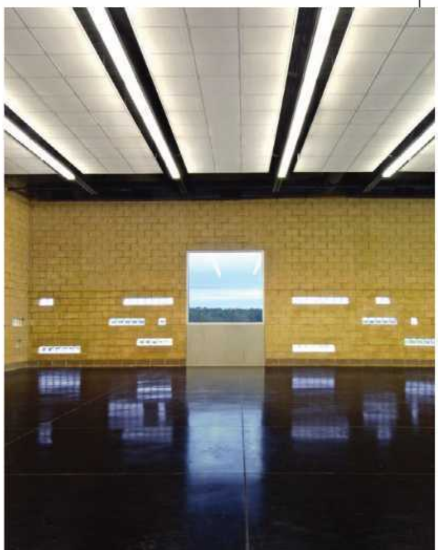
The existing school remained in operation until the new school was completed and was subsequently demolished to make way for the playgrounds.

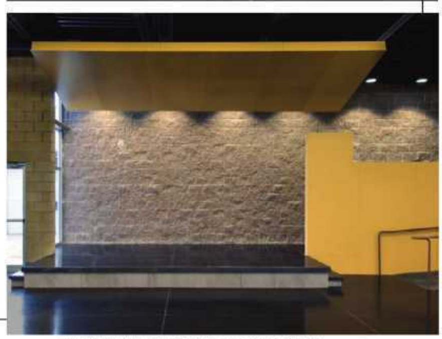
Joel E. Barber Elementary School, Multipurpose Cafeteria Addition · *Lebanon, Missouri*











Dake-Wells Architecture	
Design team: Brandon Dake, AIA; Emily Harrold, Associate AIA; Josh Harrold, Associate AIA; Andrew Wells, AIA	
Client: Laclede County C-5 School District; Jeff Plake, Superintendent	
Capacity: 200	**Space/student:** 19.25 sq. ft.
Area: 7,200 sq. ft.	**Total cost:** $950,000
Cost/square foot: $132	**Completion:** September 2007
Photographer: Gayle Babcock/Architectural Imageworks, LLC	

Design professionals often try to double and triple the programmatic needs in planning spaces for small school districts. Also, many of these schools are composed of a collection of brick, CMU and agricultural metal buildings. Utility lines, rooftop units and gravel parking lots often are overlooked. Schools often end up with a visually cluttered arrangement of bandages on their campuses. Designs should not contribute to this common disorganization and visual clutter; they should create hierarchy and bring order to a campus.

This project takes a look at how to screen the ubiquitous rooftop units and clutter that can muddy a new kitchen addition. The building is masonry with the exception of a metal screen wall that hides the rooftop equipment needed for the new kitchen. The screen is a rural material: metal barn siding. The material is humble and reflective of the community, but reinvigorated through thoughtful composition. Something old and comfortable became something new and invigorating for the school and community.

South Hackensack Memorial Elementary School
South Hackensack, New Jersey



DF Gibson Architects, PC

Design team:
A&J Consulting Engineering Services, MEP Engineer; Kafrouni Engineers, Structural Engineer; Concost Associates, Cost Estimator; Ostergaard Associates, Acoustical Engineer; Hirani Consulting, Inc., Civil/Site Engineer; Carl Stover Architects, Parking/Water Conservation

Client:
South Hackensack Board of Education; William DeFabiis, Chief School Administrator

Capacity:
250

Area:
40,000 sq. ft. (new); 25,000 sq. ft. (renovation)

Total cost:
$10.1 million

Cost/square foot:
$155

Completion:
January 2008

Photographer:
Victorio Loubriel





The addition to South Hackensack Memorial Elementary School approximately doubles the size of the school, which was built in the 1950s with an addition completed in 1964. It houses a gymnasium, cafeteria, media center and eight classrooms.

The addition complements and enhances the existing building. The main feature is the two-story entry atrium with a glass facade and clerestory windows that provide natural lighting. The gymnasium is accessed through the atrium, allowing it to be used for after-hours community functions.

The entire building will be air-conditioned. It is the first school in the state to use a direct gas-fired absorption chiller/heater. This technology is tremendously energy-efficient, resulting in heating and cooling costs 25 to 35 percent less than electronically driven chillers.





Cherry Hill Elementary School, Additions and Alterations

River Edge, New Jersey









Di Cara | Rubino Architects

Design team:
Joseph A. Di Cara, AIA, Firm Principal; Roderick Watkins, AIA, Senior Project Manager; April Leddy, CID, Senior Interior Designer

Client:
River Edge Board of Education; Erika Steinbauer, Superintendent

Area: 40,500 sq. ft.	**Total cost:** $11,524,000
Cost/square foot: $285	**Completion:** December 2007

Photographer:
John Bartelstone

The three-story addition to Cherry Hill Elementary School, dubbed New Bridge Center, accommodates the district's increased enrollment and desire for an expanded learning day. It houses kindergarten classrooms, educational space for a new program for autistic students, and dedicated classrooms for visual and performing arts. The addition, which uses traditional, warm brick tones, connects to the existing school via a glass-enclosed breezeway.

Design features include terrazzo flooring in the lobby where new administrative offices are centralized for an easily supervised and secure environment. Geometric tile patterns in bold primary colors add playfulness and creativity to the school's corridors.

Renovations to the existing school include a newly expanded media center playing up the same radiant color palette. A custom circulation desk, small-scale lounge seating and a storytelling area, backed by an expanse of glass allowing natural light to spill into the space, complete the room.

The centerpiece of the project is the Discovery Classroom, designed and constructed to be self-sufficient through solar (photovoltaic) energy. Although the classroom is still "connected" to the school, the solar energy harnessed is distributed back into the grid, resulting in a carbon-neutral educational space.

This classroom not only meets today's sustainability goals, but also raises awareness of global-warming issues for students by integrating the photovoltaic system into the classroom to enhance the district's curriculum.

Additionally, the eco-conscious classroom features green finishes, including paint with low-VOC content, and carpet and ceiling tiles manufactured from recycled materials.

North Cedar Elementary School
Mechanicsville, Iowa











North Cedar found overwhelming voter success after partnering with the construction manager to author its long-range facilities and tax-management plan, which calls for maximum educational space and community-use accessibility for each tax dollar.

Building features include a blending of educational delivery areas, providing individual and small-group spaces accessible from each of the pre-K to 4 classrooms and special program areas, and large-group instructional and activities areas. Spacious library, resource and technologies areas include a project study center and small-group areas. Exploratory learning centers are provided within each pre-K and kindergarten room, as well as a specialized science and art center.

Shared school and community-use areas include a spacious dining and activities commons, and a flexible multipurpose room with stage and support areas. Security considerations in the design allow activity areas to be open while academic areas remain locked.

High energy performance includes geothermal heating and cooling alongside high-efficiency systems and building envelope design to ensure low long-term operating costs.

Independent cost-management systems saved taxpayers nearly 20 percent compared with area average costs of traditional architect or construction-management approaches.

Facilities Cost Management Group, LLC and Rambo Associates, Inc.

Associated firm: Purdy & Slack Architects, Technical Services

Design team:
Merle Rambo, AIA, Principal-in-Charge; Harvey Anderson, Project Owner's Representative; Annette Zeplin, Project Coordinator/Designer

Client:
North Cedar Community Schools; Gregg Fuerstenau, Superintendent (during planning/funding); Mary Jo Hainstock, Superintendent

Capacity: 350 to 450	**Space/student:** 134 sq. ft.
Area: 45,984 sq. ft.	**Total cost:** $4.95 million
Cost/square foot: $102.03 (site/construction); $5.75 (equipment)	**Completion:** January 2008

Photographer:
Blaser Photography

Faye Webb Elementary School
Corpus Christi, Texas









Gignac & Associates, LLP

Design team:
Raymond Gignac, AIA;
Rolando Garza, AIA;
Carolyn Goldsmith-James, AIA;
John Silva

Client:
Corpus Christi Independent School District; D. Scott Elliff, Superintendent

Capacity:
800

Space/student:
97.8 sq. ft.

Area:
78,252 sq. ft.

Total cost:
$11.4 million

Cost/square foot:
$146

Completion:
June 2006

Photographer:
Richard Payne

Faye Webb Elementary School is the second use of this prototype elementary school design for Corpus Christi Independent School District. The school is designed to accommodate 800 students in pre-K through fifth grade.

A "Main Street," which serves as an organizing axis, separates the educational spaces from the common-use spaces. The Main Street is intersected on one side by three corridors, which provide access to the classrooms. Each wing has everything needed to support the designated grade levels.

The common-use spaces, on the other side of Main Street, can be closed off from the rest of the school for after-hours use. The media center, discovery zone and administrative offices are situated at the main entrance for easy access.

The building envelope and mechanical systems were designed for optimum energy efficiency. Daylighting is incorporated into Main Street with clerestories on the northeast exposure for the best lighting effect and energy efficiency. Daylighting also is incorporated into corridors and classrooms via skylights.

Cooper Elementary School
Bella Vista, Arkansas



Hight-Jackson Associates, PA

Design team:
Gary Ryel, AIA, Project Designer; Jeff Brust, AIA, Project Architect; Gary Jackson, AIA, Principal-in-Charge; Caroline Hall Martinez, Interior Designer

Client:
Bentonville School District; Gary Compton, Superintendent

Area:
89,566 sq. ft.

Total cost:
$12,435,000

Cost/square foot:
$138.84

Completion:
December 2007

Photographer:
Janet Warlick/Camera Work, Inc.

The goal of this project was to accommodate the educational needs of elementary students in a natural environment where many senior adults have retired. Changing demographics include younger families moving to the area for employment opportunities.

The site formerly contained a barn/stable and is surrounded by a steep hillside with a stream running along the base. The building needed to reflect the past site occupancy and recognize the rural setting.

The building was shaped around the narrow base at the bottom of the hill. Traffic flow from existing streets determined parking and entry areas.

A two-story vestibule gives volume to the second floor, which is reminiscent of a barn loft. Corridors are wide, and common functions are near the administration area. Two academic wings off the foyer balance the student population while keeping corridor length to a minimum.

Features include "barn red" siding on the second-story exterior and painted steel structure in the foyer, natural light in all areas, and a geothermal heat-pump mechanical system to maximize efficiency.









East Fairhaven Elementary School

Fairhaven, Massachusetts









HMFH Architects, Inc.

Design team: Laura Wernick, AIA, Principal; Philip Lewis, AIA, LEED AP, Project Manager; Lori Cowles, AIA, LEED AP; John Nunnari, Associate AIA, Construction Administration; Mia Ricafort, Furniture and Equipment	
Client: Town of Fairhaven; Robert N. Baldwin, Superintendent	
Capacity: 475	**Space/student:** 155 sq. ft.
Area: 74,000 sq. ft.	**Total cost:** $12,986,000
Cost/square foot: $175	**Completion:** February 2007
Photographer: David Lamb Photography	

This compact elementary school holds the distinction of being the most economically constructed new public school in Massachusetts since 2004. With a simple, straightforward plan that groups grade levels together and provides linked classrooms for flexible teaching, this replacement school achieves its efficiencies through creative programming.

The gymnasium doubles as a schoolwide performance/assembly space, where an acoustic partition isolates the stage for use as the music classroom.

Students in this new pre-K to 5 school enjoy a bright, cozy library; full-sized cafeteria and gymnasium; and specialty classrooms that were missing in the previous facility. These include the music classroom with instrument storage, computer classroom, dedicated art classroom, and a project room designed to accommodate science and other messy, hands-on exploration.

The energy-efficient building is oriented to take advantage of daylighting through skylights and classroom windows, and the artificial lighting is designed to dim automatically when there is sufficient daylight. The location of the new building and the demolition of the previous building were planned to minimize site disruption and preserve historic stone walls along the perimeter.

Banquete Elementary School
Banquete, Texas



LaMarr Womack & Associates, LP	
Design team: Todd Brendalen, Albert Soto, Robert J. Garcia, Mark Wessels	
Client: Banquete Independent School District; Jim Rumage, Superintendent	
Capacity: 500	**Space/student:** 129.3 sq. ft.
Area: 64,664 sq. ft.	**Total cost:** $9,059,911
Cost/square foot: $140.11	**Completion:** April 2008
Photographer: R. Garcia	



Banquete Elementary School is in the middle of cotton and grain country, a half-hour drive west of Corpus Christi in Banquete, Texas. The new school, in soft shades of green and earth tones of stone and masonry, rises from the black-clay flatland to welcome children from the surrounding small town and fertile farmland. Streets were closed, and traffic patterns were reconfigured and routed to facilitate a cohesive flow among the new elementary and the existing junior high and high school campuses.

Born of agricultural common sense and attitude, the pre-K to fifth-grade school reflects a cost-effective approach to durability, function and aesthetics, sparkled here and there with spring-like detailing of color.

The new campus separates bus and parent dropoffs. The front of campus is a highly visible check-in space for all visitors. Although this community is a "hug and handshake" zone, all doors are locked down.

The school has 25 classrooms, a science room, two fine-arts classrooms, two special-education classrooms, a life-skills classroom, computer lab, library with a stepped-floor reading area, reading classroom and speech classroom. The school also has a cafetorium with a raised stage and a small gym for school and after-school programs. The kitchen is centralized and sends meals to the two other campuses.





Benavides Elementary School
Benavides, Texas





LaMarr Womack & Associates, LP

Design team: Todd Brendalen, Albert Soto, Johnny L. White, Robert J. Garcia, Mark Wessels	
Client: Benavides Independent School District; Ignacio Salinas Jr., Superintendent	
Capacity: 300	**Space/student:** 135.6 sq. ft.
Area: 40,678 sq. ft.	**Total cost:** $6,746,894
Cost/square foot: $165.86	**Completion:** June 2008
Photographer: R. Garcia	

Benavides Elementary School, built in Duvall County in South Texas, replaced a two-story, sun-dried and weathered building from the 1900s that once was the heart of Benavides, Texas. The new school took design elements from the former school, as well as other regional architectural detailing of the former oil-boom town. The tight-knit community overwhelmingly passed a bond issue to build the new school.

The pre-K to fifth-grade campus separates bus and parent dropoffs with a covered canopy to serve both. Administration is situated to receive visitors directly from the front entry. The library opposite the hall is circular and surrounded by windows to let in morning light. At night, the entry skylight beckons the community with an inviting blue glow.

The school has 10 classrooms for pre-K through third grade, a resource classroom, two science/lab classrooms, a social studies classroom, two math classrooms, and two English classrooms for fourth and fifth grades. A life-skills classroom serves all grades. The new kitchen is the central kitchen for the district and serves meals to the nearby secondary campus as well.

The school is rich in color, which is most celebrated in its cafetorium. It has a raised stage area for school presentations. The community is very proud of its new jewel in the South Texas desert.





Cherry Valley Elementary School
Newark, Ohio



Legat & Kingscott, LLC

Associated firm: JBA Architects, PC

Design team: M-Engineering, Structural/MEP/Technology; Jobes-Henderson & Associates, Civil; Baker Group, Food Service	
Client: Newark City Schools; Keith Richards, Superintendent	
Capacity: 500	**Space/student:** 122 sq. ft.
Area: 61,000 sq. ft.	**Total cost:** $8.6 million
Cost/square foot: $140.98	**Completion:** January 2008
Photographer: Kevin Lynn Photography	

Newark City Schools had three goals for Cherry Valley Elementary, a prototype design used four times in the district:

•Establish educational parity throughout the district.

•Create a nurturing environment.

•Support curriculum programs.

Of the district's 12 elementary schools, eight were closed. Four new schools were constructed, and existing campuses were remodeled and expanded. This resulted in eight elementary schools with stimulating learning environments.

Many students moved from a 200-student school to attend a larger facility. The environment had to feel comfortable and safe to young students. The design accomplished this by:

•Creating four classroom neighborhoods and shifting corridors to break sightlines, making each seem small and home-like.

•Eliminating hall lockers and using cubbies in each classroom.

•Using color patterns as wayfinding markers.

The design resolved many curriculum issues by:

•Creating space in wide corridors for volunteer tutoring programs.

•Accommodating small-group areas in classrooms for interactive literacy and mathematics programs.

•Using space and storage to support hands-on learning.

•Maximizing natural light.











Shatekon Elementary School
Clifton Park, New York



Mosaic Associates
(formerly Dodge Chamberlin Luzine Weber Associates Architects)

Design team:
Martin Weber, AIA, Partner-in-Charge; John J. Jojo, AIA, Associate-in-Charge; Russ Whitlock, Architectural Designer; Scott Swenson, PE, Principal-in-Charge; Joe Ruiz, Dave Benedetto, HVAC Design; Tom Morin, Electrical Design; Dave Riha, Plumbing/Fire Protection

Client:
Shenendehowa Central School District; L. Oliver Robinson, Superintendent

Capacity:
700

Space/student:
105 sq. ft.

Area:
73,590 sq. ft.

Total cost:
$16,840,192

Cost/square foot:
$230

Completion:
August 2007

Photographer:
Randall Perry Photography









To resourcefully maximize funding, Shatekon Elementary School was designed to connect physically with its sister school, yet embrace its own identity, educational culture and mission. To differentiate Shatekon from its sister school, the designer created a separate vehicular entrance with controlled access between the two schools.

Shatekon, meaning "balanced life," includes a beautiful, lofty entrance and atrium gathering space that provides daylighting and controlled security access. The media center is situated centrally opposite the entrance, isolated from the academic wings and accessible for use after hours. Two academic wings distinctly separate the lower K to 2 grades from the higher 3 to 5 grade level. The gymnasium offers multipurpose and community use as it includes a stage area for school performances and activities, as well as public restrooms.

Classrooms are bright and airy, including the colorful kindergarten rooms, which feature a prominent arch at the back of each room and encompass the reading and play areas for students. Additionally, there are dedicated art, music and computer classrooms throughout the building.

Shatekon is air-conditioned with a specialized chiller to minimize noise and features energy-efficient light fixtures throughout.

ELEMENTARY SCHOOL

Cambridge Lakes Learning Center
Pingree Grove, Illinois











Newman Architecture

Design team: Leanne Meyer-Smith, AIA, Design Principal; Jeff Brenkus, Project Architect; Jenna Pergande; John Kaczmarek; Stephanie Smith		
Client: Northern Kane Educational Corp. with Cambridge Homes; Karen Behrens, Principal		
Capacity: 450	**Area:** 48,715 sq. ft.	**Total cost:** $7,519,108
Cost/square foot: $154.35	**Completion:** August 2007	**Photographer:** Paul Schlismann Photography

Cambridge Lakes Learning Center in Pingree Grove, Ill., is the first charter school in the state to be initiated by a residential developer, Cambridge Homes. In addition to being one of many value-added elements in this all-inclusive community, it also is an innovative solution to provide space in a crowded public school district.

The first phase of this groundbreaking school serving more than 400 students opened in fall 2007 after just seven months of construction. When future building modules are added, the campus will accommodate 1,000 students.

The fast-track construction of this school was accomplished with pre-built modular classroom units clustered around a high-ceilinged, conventionally constructed, central multipurpose space. Each building is home to only two grade levels, and the buildings are connected with enclosed corridors.

Bright colors on floors and walls not only provide an exciting learning environment, but also assist in defining grade levels and specialized areas. Cambridge Lakes Learning Center combines imaginative design with progressive thinking to create a replicable model for other developers and school districts.

Snyder Elementary School
Snyder, Texas



Parkhill, Smith & Cooper, Inc.

Design team:
Jay Edwards, PE, Principal-in-Charge;
Mike Baker, AIA, Project Manager;
W. Scott Hensley, PE, Mechanical Engineer;
Allan B. Wolf, PE, Structural Engineer;
Jeff Reed, Associate AIA, Project Designer;
David Vincent, Associate AIA, Project Designer

Client:
Snyder Independent School District;
Ronnie Collins, Superintendent

Capacity:
1,200

Space/student:
118.33 sq. ft.

Area:
142,000 sq. ft.

Total cost:
$16,606,617

Cost/square foot:
$116.95

Completion:
June 2007

Photographer:
Geof Harral





Snyder Independent School District decided to close six obsolete elementary schools and combine the 1,200 students into one main facility, gaining staffing efficiency and conserving energy and natural resources. The facility's student grade levels are divided into halves (K to 2 and 3 to 5), each separated by a shared central core of common-use spaces. Major spaces such as the gymnasium, media center and cafetorium are designed as dividable spaces to ensure the separation of age groups and their educational requirements.

Floor patterns and color schemes enhance the separate identities of each half of the school, and the six new classroom wings are designed as symbolic representations of the six closed schools—distinguished by separate interior entries and named for each of the original schools.







Douglas County School District, New Elementary School Prototype
Castle Rock, Colorado



RB+B/H-F Architects, LLC

Design team:
The Sheflin Group, Structural Engineer; The RMH Group, Inc., Electrical Engineer; Shaffer-Baucom Engineering & Consulting, Mechanical Engineer; JVA Consulting Engineers, Civil Engineer; Design Concepts, Landscape Architect; Keesen Water Management, Inc., Irrigation Consultant; William Caruso & Associates, Inc., Food Service

Client:
Douglas County School District; Richard Cosgrove, PE, Director of Construction

Capacity: 690	**Space/student:** 106 sq. ft.
Area: 73,146 sq. ft.	**Total cost:** $11,820,000 (building and site)
Cost/square foot: $162	**Completion:** November 2007

Photographer:
Paul Brokering Photography

As the result of a design competition, this 73,000-square-foot elementary school was built as an energy-efficient prototype, allowing for academic flexibility and adaptation to various sites in Douglas County. The high-performance design includes a high-efficiency building envelope coupled with state-of-the-art daylighting strategies. The facility provides significant savings by performing at less than half the energy cost of existing schools. Increased occupant comfort, higher student performance, lower energy costs (including boilers that are 30 percent smaller than average), and unique design features all add to the success of this innovative project.

Additional design features contribute to the optimal performance of this prototype:

•Clerestory windows in concert with the sloped ceiling bring natural light farther into classrooms while minimizing glare.

•Windows below the clerestories offer views and a connection to the outdoors.

•Natural light enhances student learning and creates invigorating indoor spaces, decreasing the need for electrical lighting and overall energy use.

•Classrooms have light sensors that turn lights on or off automatically to create optimal lighting conditions.







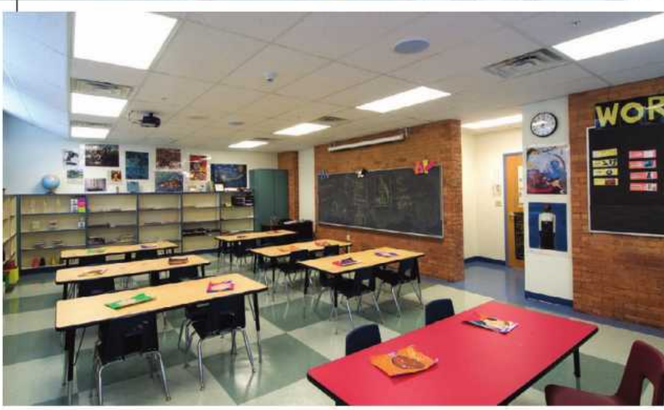


Henry Johnson Charter School
Albany, New York









Rhinebeck Architecture & Planning PC

Associated firm: BBL Construction Services, LLC	
Design team: J. Louis Turpin, AIA, LEED AP, Principal-in-Charge; Phillip Zemke, AIA, LEED AP, Project Architect; John Sharkey, AIA, LEED AP	
Client: Brighter Choice Foundation; M. Christian Bender, Executive Director	
Capacity: 375	**Area:** 35,000 sq. ft.
Total cost: $5.8 million	**Cost/square foot:** $165
Completion: September 2007	**Photographer:** BBL Construction Services, LLC

Situated in the West Hills area of the city, Henry Johnson Charter School is named for Albany's hero of the first World War. The building was constructed in 1888 as Public School 3 for the city of Albany. It was converted into an office building in the 1970s.

In 2004, the architect began working with The Brighter Choice Foundation and the construction manager to return the building to is former use. The exterior and interior masonry construction was well-preserved, and significant portions of the existing building were retained and reused. The interior received a complete renovation, and an addition was constructed to provide new classrooms, a gymnasium, media center and administrative space to house 375 elementary students in grades K to 4. The addition was designed to provide space for education, to appropriately respond to and respect the scale and materials of the older facade, and to meet the demands of the schedule and budget.

New mechanical and electrical systems were installed to provide energy-efficient operation and a sustainable future.

Shenandoah Elementary School, Renovation and Additions
Orlando, Florida



Rhodes+Brito Architects

Design team:	Ruffin Rhodes, AIA, Principal-in-Charge; Byron Lastrapes, AIA, Project Manager/Designer; Rick Dunn, Assistant Project Manager/Designer
Client:	Orange County Public Schools; Ronald Blocker, Superintendent
Area:	86,000 sq. ft.
Total cost:	$11.4 million
Cost/square foot:	$132.56
Completion:	August 2008
Photographer:	Jennifer Seck



The architect transformed an outdated campus into a modern learning environment for the students and staff of Shenandoah Elementary School. The campus was transformed playfully into a tool for applying modern education techniques. Completed in summer 2008, the project included the construction of a two-story, 39,000-square-foot administration and classroom addition, and the renovation of 47,000 square feet of existing space (constructed in the 1960s).

The addition complements the architecture of the existing building and provides the school with a dynamic new main entrance that is playful and easily identifiable. The addition includes new administrative suites, 10 classrooms and a new media center.

The renovation and additions provided every classroom exterior exposure with operable windows, as well as individualized and centralized storage. Technology was integrated into every classroom.





Alvaton Elementary School
Bowling Green, Kentucky











Sherman Carter Barnhart

Design team:	
Philip C. Gayhart, AIA; Kenny Stanfield, AIA; Brantley Adams; Ken Ross	
Client:	
Warren County Board of Education; Dale Brown, Superintendent	
Capacity: 700	**Area:** 77,000 sq. ft.
Total cost: $11.3 million	**Cost/square foot:** $146.76
Completion: August 2006	
Photographers: Marshall Ray; SCB (exterior)	

This Energy Star school was designed to meet Warren County School District's goal of green design, which emphasizes energy efficiency and consumption. The school's green design components include:

- Insulated concrete form (ICF) wall construction.
- Sandwich panel metal roof system.
- Geothermal heat-pump system.
- Lighting and HVAC occupancy sensors.
- Clerestory daylighting.
- Green finishes.

Alvaton is the first educational building in Kentucky to use the ICF system, which offers increased building envelope insulation. The school's energy-saving design uses 35 kBtu's annually—less than half the ASHRAE 90.1 design standard for elementary schools.

The "great hall" links the media center with other public areas of the building, including the gymnasium, cafeteria and entrance lobbies on the upper level. The need for artificial lighting during the typical school day is reduced by the great hall's full-length clerestory that washes the entire space, and adjacent spaces, with natural light.

Freiheit Elementary School

New Braunfels, Texas



SHW Group LLP

Design team:
Thomas R. Oehler, AIA, Managing Principal;
Christian Owens, AIA, Design Lead;
Tavo Reyes, Project Manager

Client:
Comal Independent School District;
Marc Walker, Superintendent

Capacity:
824

Space/student:
101 sq. ft.

Area:
83,400 sq. ft.

Total cost:
$11,174,000

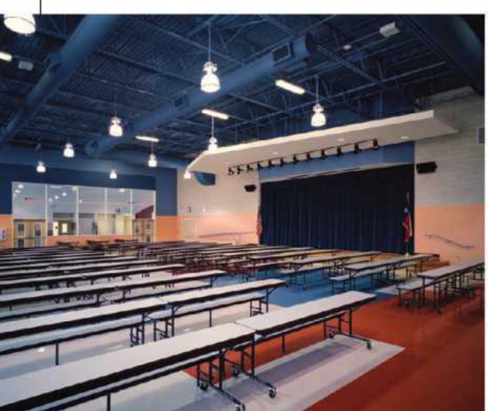
Cost/square foot:
$134

Completion:
August 2007

Photographer:
Mark Trew









Freiheit Elementary School is one of Comal Independent School District's newest campuses, serving more than 800 students in grades pre-K to 5. The school was part of a $189 million bond referendum approved by voters in 2005. It will serve as a prototype for future elementary schools in the district.

One of the features making it a successful design is the efficient layout. The compact configuration allowed for a smaller building footprint to minimize materials costs and site modification. The classroom wings also were designed to be extended easily to accommodate additional classroom growth needs.

Another feature the district wanted was the separation of loud and quiet spaces. The loud public spaces—cafeteria and gymnasium—are placed at the front of the school, and the quiet spaces—classrooms and library—are toward the back. Security elements allow for community use of the gymnasium and cafeteria after hours, without the ability to access the classrooms.

The materials were chosen with economy and life cycle in mind. Masonry was used on the building because of its track record in the district as a durable and maintainable surface.

Tarver Elementary School

Temple, Texas









SHW Group LLP

Design team: Thomas R. Oehler, AIA, Managing Principal; Christian Owens, AIA, Design Lead; Koleman Uresti, Project Manager	
Client: Belton Independent School District; Vivian Baker, Superintendent	
Capacity: 800	**Space/student:** 93.75 sq. ft.
Area: 75,000 sq. ft.	**Total cost:** $12,166,648
Cost/square foot: $162	**Completion:** August 2007
Photographer: Mark Trew	



The vision and design expectation for the campus was for the students to be excited about learning. Communal hubs join each grade level to create an environment for learners and facilitators to participate and collaborate in joint learning. Students are able to interact with one another and have the opportunity to enhance what they have learned in the classroom.

The "learning courtyard" connects the science labs and the learning environment. This space is accessed directly from the science classrooms, allowing students to conduct and study outdoor experiments. A protective play area for the youngest children, including a tricycle track, is situated between two classroom wings. The intent of the multipurpose room is for students to display artwork and science projects. Depending on the school's use, the transparent room is converted easily between the two subjects, creating a constant learning atmosphere.

A unique design notation was incorporating the stage area into the play area. These spaces are separated by a movable wall during performances. When the stage area is not in use, the wall remains open for students to use during their time in the play area. This feature also helped reduce the building's overall square footage.

Centennial Elementary School
Edmond, Oklahoma







The Stacy Group

Design team:
Michael Stacy, Principal; Sean Willis, Studio Director; Bonnie Benefield, Project Manager; Allison Curran, Interiors Director

Client:
Edmond Public Schools; David Goin, Superintendent

Area:
73,008 sq. ft.

Total cost:
$10,157,654

Cost/square foot:
$139.13 (including site costs)

Completion:
July 2007

Photographer:
Imageworks Studio

Opening in the year of the state's centennial, the newest elementary school in the district took on the name Centennial Elementary School. Nestled in a wooded site, the building respects and reflects the setting by integrating natural materials, maintaining trees and natural features, and planting native grasses. The commons spaces are designed to maximize daylighting and views toward the trees.

The school includes items that are designed to teach students the history of the state. Built into the school are water-jet-cut wall and floor tile depicting the state flag, seal and adopted state symbols. The state song is featured in the commons, and the state map, including the counties, is cut into the carpet in the media center. Future additions are to include more state symbols.

The elementary serves grades K to 5 and is designed in a pod layout for maximum teaching flexibility and security. Each pod walks out onto an outdoor classroom area. The school is master-planned for future additions and to meet the demands of a growing district.



Lincoln Elementary School
Cedar Falls, Iowa



StruXture Architects

Design team:
Dale R. Port, AIA; Edward A. Otteson, AIA; Jane Miller, IIDA, LEED AP; Randy Brinkman

Client:
Cedar Falls Community School District; David W. Stoakes, Superintendent

Area:
72,745 sq. ft.

Total cost:
$8,568,343

Cost/square foot:
$117.79

Completion:
August 2006

Photographer:
Dale Photographics, Inc.

Sited in a historic section of town, this replacement elementary school cleared a major design hurdle: bringing both the building and the playground area onto the site. The areas had been separated by a busy thoroughfare, and collaboration among school, city and fire officials resulted in closing the street to establish a single campus.

The building's design respects the surrounding residences with historical elements incorporated throughout the exterior. It provides neighborhood access from the north and south via entrances directly opposite each other, entering into a common lobby, where the salvaged stone entry pays tribute to the previous building.

K to 2 is served on grade level, and grades 3 to 6 are on the upper level. Shared spaces (media center, computer lab, multipurpose room, cafeteria, administration) are centralized around the lobby and entrances. The multipurpose room/gym was designed for school use, as well as city recreational programs, and offers a performance platform area for the band and orchestra. Addressing the multiple uses of the cafeteria/multipurpose room, operable walls sound-seal three individual spaces and make them flexible for simultaneous use.

The new campus' recreational features include a ball diamond, basketball court slab, running track, soccer field and two separate playgrounds—one for older children and the other for younger children.













Merriam Park Elementary School
Merriam, Kansas







Warner • Nease • Bost Architects, Inc.

Design team: Garett Warner, AIA, Principal-in-Charge; Craig Brannin, AIA, Project Architect; Structural Engineering Associates, Inc., Structural Design Engineer; Henthorn, Sandmeyer & Company, MEP Design Engineer; LHE, PA, Civil Engineer; Terracon (Investigation) and PSI (Observation), Geotechnical Engineers	
Client: Shawnee Mission Unified School District No. 512; Marjorie Kaplan, Superintendent	
Capacity: 550	**Space/student:** 126 sq. ft.
Area: 69,548 sq. ft.	**Total cost:** $9,181,517
Cost/square foot: $132	**Completion:** August 2007
Photographer: Bill Manginelli	

The patrons of Shawnee Mission School District passed a bond issue to fund replacement of a number of older school buildings that were not adequately serving the educational requirements of the 21st century. Merriam Park Elementary School replaces two schools whose populations were too small to continue operating efficiently. Merriam Park is a three-unit, K-6 facility that incorporates all of the district's new design standards for elementary schools, including educational technology, electronic access and security, audiovisual and energy-management systems, and communications.

The school district asked for a masonry building and required that it be constructed on the site of the existing Merriam Elementary, which had to be kept in operation until the new school was ready for occupancy. The lobby is a focal point of the school and opens to the media library, which offers views to an adjacent wooded area. The corridor serving the gym and cafeteria displays a timeline that chronicles the civil-rights movement within Shawnee Mission.

The designers strove to encourage enthusiasm for learning in this school.





Aurora Elementary School
West Fargo, North Dakota



YHR Partners, Ltd.
Design team: Richard L. Meier, AIA; Julie N. Rokke, AIA, CID; Amy Nash
Client: West Fargo Public School District No. 6; Dana Diesel Wallace, Superintendent
Capacity: 600
Space/student: 116 sq. ft.
Area: 69,900 sq. ft.
Total cost: $7,802,642.09
Cost/square foot: $111
Completion: June 2007

Needing to address major growth in the city of West Fargo, the school district passed a bond election for a new 600-student, 24-classroom elementary school in the Eagle Run subdivision of West Fargo.

The site has separate bus and car dropoff areas to ease traffic congestion and increases the safety of students before and after school. The two separate entries, both visible from the administrative offices, are connected to a commons area that collects students into one easily monitored area. The classroom pods are color-coded for easy identification; the media and music area are in the center. The building is designed in two parts: public/community-use spaces and classroom media spaces, which can be separated by locked doors to allow the community to use the commons and gym area after hours. The administration area is situated so it can be accessed easily by visitors, and has visual control of public entries and commons spaces.

The building infrastructure is designed for future expansion to the north.











Village Oaks Elementary School

Immokalee, Florida









The Village Oaks Elementary project included a full-scope confirmation analysis, as well as existing facility and systems assessments. After review, the school was modernized under the district's plan to convert existing K-5 elementary schools to a K-6 grade configuration through reprogramming, remodeling and a major addition to upgrade the facility to current district and educational standards. The program integrated more than 20,000 square feet of new construction containing classrooms, administration and guidance areas, and a P.E. shelter.

About 68,000 square feet of renovation work included ADA toilet upgrades, the creation of shared teacher-planning areas and a new HVAC system with electrical upgrades.

The design expanded the site and facilities to create a new face to the campus, and provided separate age-group areas within the facility and a centralized exterior learning courtyard. The facelift was completed by replacing the school's entire roof system. The new campus is highly secure, utilizing a main entry situated at the administration area. The campus also provides extended on-site dropoffs and expanded parking.

Zyscovich Architects

Design team:
Jose Murguido, AIA, Principal-in-Charge; Michael Ehrling, Architectural Designer; Carlos Sanabria, Project Architect; Elaine Rodriguez, ASID, Interior Designer

Client:
District School Board of Collier County; Alvah Hardy, Executive Director of Facilities Management

Capacity:
1,998

Space/student:
47 sq. ft.

Area:
94,000 sq. ft.

Total cost:
$13.9 million

Cost/square foot:
$147.87

Completion:
January 2007

Photographer:
Moris Moreno Photography

MIDDLE SCHOOLS

CITATIONS

Legat Architects, Inc.
Colin Powell Middle School
Matteson, Illinois .... p. 76



"Outstanding energy efficiency. The design is student-friendly. We applaud the daylighting and collaborative zones."

—2008 Jury

Studio B Architects
Aspen Middle School
Aspen, Colorado .... p. 74-75



"Judicious use of materials in key areas. Good integration of learning spaces. We like the use of materials and the inside/outside connections."

—2008 Jury

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Aspen Middle School
Aspen, Colorado







Studio B Architects, Design Architect

Associated firm: Hutton Ford Architects, Architect of Record

Design team:
SBA: Scott Lindenau, Gilbert Sanchez, Mike Piché;
HFA: Paul Hutton, Kari-Elin Mock

Client:
Aspen School District; Diana Sirko, Superintendent

Capacity:	Space/student:	Area:
500	226 sq. ft.	113,000 sq. ft.
Total cost:	**Cost/square foot:**	**Completion:**
$28.45 million	$252	August 2007

Photographers:
Time Frame Images; Aspen Architectural Photography; Studio B Architects

The new Aspen Middle School building enhances the Aspen School District's emphasis on creative classroom learning, outdoor education and environmental responsibility. A comfortable and stimulating environment is achieved with ample daylighting, improved indoor air quality, new high-efficiency building and technology systems, better access and security, and views and spaces that connect the building's users to the surrounding mountain landscape.

The architectural vocabulary of the new building reinforces the campus image established by other buildings on the school district's campus. Regionally manufactured brick, metal panels, translucent panels and aluminum-framed, high-performance glazing are modern and durable, and low- and no-maintenance materials sheath the building's exterior surfaces. The extended canopy identifies the main east-facing entry, and the adjacent arcade provides a safe, visible, protected shelter for student dropoff and pickup. Light louvers, solar shades and "tuned" high-performance glazing control the effects of the sun around the facility.

Natural light and views, and operable windows are provided to all educational spaces. Window openings and sun-shade devices respond to the solar orientation and create a distinctive aesthetic. Wherever possible, sustainable materials such as bamboo, recycled content flooring and ceiling tiles are incorporated into the design. In many instances, cabinets from the old facility were reused in the new building. All new casework was formaldehyde-free. Interior materials use low-VOC paints, finishes and adhesives. High-efficiency mechanical, electrical and plumbing systems integrate innovative products and techniques such as solar air heating, waterless urinals, occupancy sensors and solar tubes to make this the most energy-efficient classroom building on campus.

These combined strategies will result in a high-performance building that reduces almost 1 million pounds of CO_2 per year, reduces water usage by 40 percent, and reduces stormwater runoff by 25 percent. The project received LEED gold certification.







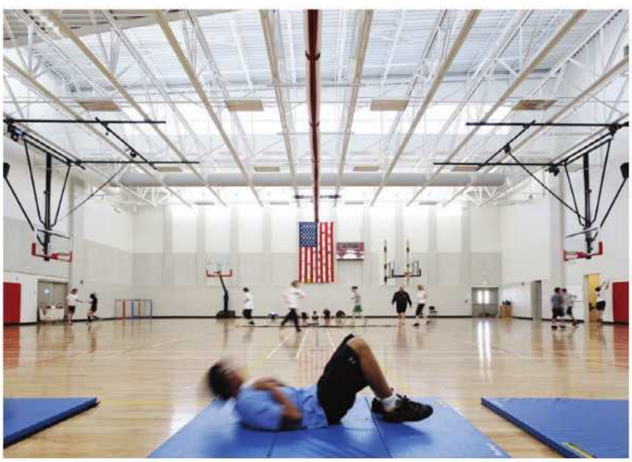




"Judicious use of materials in key areas. Good integration of learning spaces. We like the use of materials and the inside/ outside connections."

—2008 Jury







Colin Powell Middle School
Matteson, Illinois

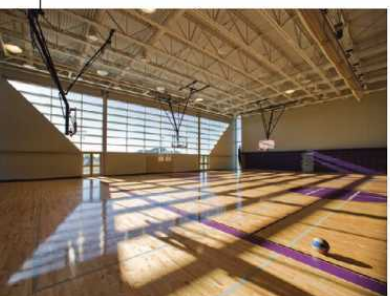


Legat Architects, Inc.

Design team: Wayne Machnich, AIA, LEED AP, Project Principal; Patrick Brosnan, AIA, LEED AP, Project Director; Jay Johnson, AIA, LEED AP, Project Manager; Vuk Vujovic, LEED AP, Project Architect; Greg Spitzer, LEED AP, Project Designer; Zachery Wiese, LEED AP; Marc Rohde, AIA, LEED AP	
Client: Elementary School District 159; Therese O' Neill, Business Manager	
Capacity: 1,000	**Space/student:** 130 sq. ft.
Area: 130,000 sq. ft.	**Total cost:** $20,892,000
Cost/square foot: $161	**Completion:** September 2006
Photographer: Steinkamp Photography	

"Outstanding energy efficiency. The design is student-friendly. We applaud the daylighting and collaborative zones."

—2008 Jury









Energy efficiency, respect for nature and openness drove the design of Colin Powell Middle School. Three V-shaped classroom wings connect to an enrichment core with a band/choir room, learning resource center, cafetorium, practice gym and large gym.

High-performance technologies include:

- The largest pond-based geothermal system in Illinois reduces energy costs and supports curriculum.
- A daylight harvesting system brings natural light to 90 percent of the interiors.
- Sloped metal roof plates over common spaces are angled for future photovoltaic cells.

An open floor plan engages natural surroundings and promotes safety. Classroom wings respond to solar orientation, offer views to the site and optimize circulation patterns. Enclosed courtyards and glass-clad corridors bring daylight and nature deep into the building, and display internal activity.

A diverse materials palette includes:

- Brick-clad classroom wings complement the adjacent city hall.
- Sage green and silver metal panels identify higher volumes and define exterior walls.
- Precast concrete identifies the entry wedge and gymnasium.
- Glass walls and clerestories optimize daylight and views.

Branson Intermediate School
Branson, Missouri



ACI/Frangkiser Hutchens, Architects & Planners

Design team:
Michael Kautz, Principal-in-Charge;
Pat Sutliffe, Project Architect;
Christine Parisi, Interior Designer

Client:
Branson R-IV School District; Doug Hayter, Superintendent

Capacity:
650

Space/student:
163 sq. ft.

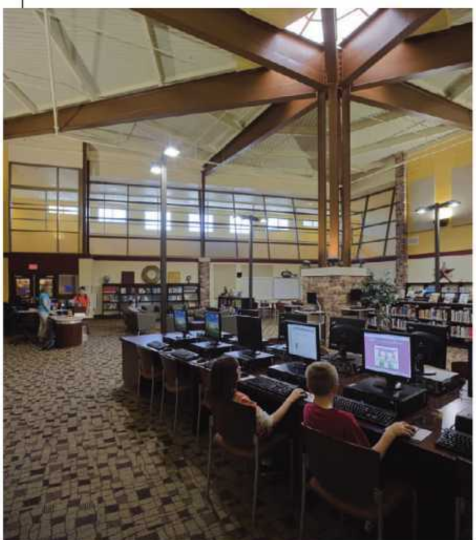
Area:
105,850 sq. ft.

Total cost:
$16,115,095

Cost/square foot:
$152.24

Completion:
January 2008

Photographer:
Michael Spillers





The main challenge for this project was site development because of rugged topography and a large amount of rock excavation, which had to be performed to fit the building footprint. The two-story compact and efficient design eliminates excessive distances between classrooms and the rest of the building. The building is easier to supervise because of shorter corridors and better visibility.

A focal point for this school is the two-story media center that is on the lower floor at the core of the building. It has a unique, exposed steel roof structure that seems to sprout from the center of the room and gives the appearance of a "tree-like" form. Windows in the corridor above allow natural light to reach the media center.

Another unique feature is the outdoor dining area outside the cafeteria. This area is set up with picnic tables under a natural wood trellis. It also is a warm and inviting space for use during community or after-school activities.









Newcastle Middle School
Newcastle, Oklahoma



Design Architects Plus, Inc.

Design team: Kahle A. Wilson, AIA, Principal	
Client: Newcastle Public Schools ISD No. 001; Robert Everett, Superintendent	
Capacity: 500	**Area:** 81,268 sq. ft.
Total cost: $8,601,000	**Cost/square foot:** $105.83
Completion: August 2007	**Photographer:** Kahle Wilson











Newcastle, Okla., had crowding problems at its existing elementary and middle school facility. Because the schools were next to each other and already shared a cafeteria, the district decided to build a new middle school and convert the existing middle school to an upper elementary. This option enabled the district to build a new middle school to meet the needs of the growing community.

The new middle school was designed to serve students and the community, and to have an identity that would be long-lasting and set apart from the existing institutional school buildings.

The floor plan was organized around a large "Main Street" corridor. The west end of the corridor serves as access to the academic wings, including the art and library spaces. The east end has access to the kitchen, gym and administration area, and can be secured during after-hour activities. The main corridor allows for visual observation from one point near the main office and adds additional security options to the building.

Because Oklahoma is in "Tornado Alley," student safety was a big concern. Four separate "safe rooms" designed to handle winds up to 250 mph are situated in the academic wings of the facility.



Shallow Brook Intermediate School

Manchester, Pennsylvania









EI Associates

Design team: Gary J. Bannon, AIA, Principal-in-Charge; Daniel J. Bierzonski, AIA, Director of Production; Reed Hoffman, AIA, CSI, Project Architect; Christopher R. Atwood, CSI, Specifications; Susan Zangrilli, Interior Design	
Client: Northeastern School District; Robert J. Tabachini Jr., Superintendent	
Capacity: 600	**Space/student:** 157 sq. ft.
Area: 93,790 sq. ft.	**Total cost:** $13,258,300 (not including site costs)
Cost/square foot: $142	**Completion:** September 2007
Photographer: Bryson Leidich	

Shallow Brook Intermediate School is designed to meet Northeastern School District's educational program and to accommodate 600 students with core facilities designed for a future expansion accommodating 725 students.

Sharing an existing district campus with an elementary and an intermediate school, the new intermediate school was sited with this and other campus features in mind. The building takes further design cues from the landscape and responds to several features, including an existing ridge. The ridge provided an organizational mechanism, ordering the building so that the classroom wing occupies one side of the ridge, and the primary building support and mechanical spaces occupy the other side.

Primary circulation through the building follows the spine of the ridge, and the classrooms are situated to take advantage of views of an adjacent woodland and stream. The northern terminus of the classroom wing is the semicircular media center whose ample glazing provides not only natural sunlight and views of the surrounding landscape, but also a visual connection to other district buildings found on the site.

Villago Middle School
Casa Grande, Arizona











Emc2 Group Architects Planners, PC

Design team:
Ron Essley, AIA, NCARB, REFP, Principal-in-Charge; Rick Carr, AIA, LEED AP, Project Manager; Sean Hogan, Assistant Project Manager

Client:
Casa Grande Elementary School District No. 4; Frank Davidson, Superintendent

Capacity:	Space/student:	Area:
1,000	96.81 sq. ft.	96,807 sq. ft.
Total cost:	**Cost/square foot:**	**Completion:**
$10,382,358	$107.25	August 2007

Photographer:
Shelley Marie Images

Villago Middle School features five, one-story education buildings on 28 acres in the heart of an exclusive housing development in Casa Grande. The district wanted to create a campus-like setting for the new school that would resemble another middle school in the district. For this reason, the buildings use design elements such as a split-faced block wainscot along the building perimeter, and accent split-faced banding and standard smooth-faced block. The building field walls are a painted finish over masonry with a combination of field and accent colors.

Key building entrances are defined by a pitched hip roof, and masonry columns support the metal roof. Covered canopy elements are on each building, and parapet roofs define classroom wings with metal angle-suspended canopies over doors and windows. All pitched-roof elements consist of fiberglass shingles. Building lighting consists of curved wall fixtures that provide illumination of the facade and walkways adjacent to the buildings.

Charles A. Huston Middle School, Additions and Renovations
Lower Burrell, Pennsylvania



Foreman Architects and Engineers

Design team:
Phillip Foreman, AIA, Principal-in-Charge; Dana Steadman, AIA, Project Manager; Gary Hepler, AIA, Project Architect; Mandar Kulkarni, Designer; Dan Loutzenhiser, Mechanical Engineer; Dayne Volz, Electrical Engineer; Robert Black, RLA, Landscape Architect; Gary Giles, PE, Structural Engineer; David Foreman, PE, Civil Engineer

Client:
Burrell School District; George Staudenmaier, Superintendent

Area:
124,447 sq. ft.

Total cost:
$18 million

Cost/square foot:
$144.64

Completion:
December 2007

Photographer:
Gary Yon Photography



The design called for the additions and renovations to the Charles A. Huston Middle School to resemble the existing building and create a more modern feel for the interior spaces and new exterior facades.

The existing building is a two-story, steel-framed building with non-load-bearing masonry curtainwalls. The new additions resemble the old with steel structure and a mix of load- and non-load-bearing, matching brick masonry walls with punched openings and large areas of aluminum curtainwall framing. The additions updated the facades by incorporating curved roofs to offset the existing building's style.

The revamped interior includes new administration offices, an auxiliary gym, a multipurpose large-group instruction room, maintenance offices, as well as a new library wing. The auditorium has been refurbished with not only stage equipment, lighting, sound and new seating, but also acoustic panels and sound-reflective clouds to provide a better venue for school events and presentations. These additions now are under review to acquire LEED certification.





Alfred G. Waters Middle School
Middletown, Delaware



Gilbert Architects Inc.

Design team:
Harry J. Pettoni, REFP, Principal-in-Charge; Brian K. Good, AIA, Senior Project Manager; Fu Kha, Project Manager; Jessica Jack, Kelly Groom, Interior Design

Client:
Appoquinimink School District; Tony J. Marchio, Superintendent

Capacity:
1,000

Space/student:
111 sq. ft.

Area:
111,000 sq. ft.

Total cost:
$15,779,129

Cost/square foot:
$142.15

Completion:
August 2007

Photographers:
Eric Crossen Photography; Gilbert Architects



This 1,000-student middle school is dedicated to the memory of Alfred G. Waters, a devoted educator and lifelong learner who served as a teacher, principal, assistant superintendent and superintendent of Appoquinimink School District. He is remembered most for providing leadership and inspiration to thousands of young people.

The school houses students in grades 6 to 8, each with its own academic wing. Students and teachers can use centralized learning pods in each wing, allowing for a variety of applications including team-teaching presentations, science labs and group projects. A central spine through the main building connects the three wings and encompasses common areas, including a gymnasium, auditorium, cafeteria, library/media center, computer lab, administration suite, reception area, teacher workrooms and conference rooms.

The overall design is part of the campus plan, allowing for greater efficiencies within the site. Its flexibility encourages a sense of community, allowing for zoning of after-hours activities and providing a sense of synergy reflective of today's educational requirements.





Logan Middle School
North Versailles, Pennsylvania









HHSDR Architects/Engineers

Design team: J. Greer Hayden, Principal-in-Charge; Matthew P. Franz, Project Architect		
Client: East Allegheny School District; Roger A. D'Emidio, Superintendent		
Capacity: 878	**Area:** 135,363 sq. ft.	**Total cost:** $22,352,616
Cost/square foot: $165.13	**Completion:** August 2008	**Photographer:** Cimperman & Co.



Logan Middle School culminates a planning and design process that resulted in an elementary school closure and middle-grades restructuring. The school serves students in grades 4 to 8 in a building divided into two wings.

A single-story wing houses a 900-seat spectator gymnasium, a 700-seat auditorium, cafeteria and administrative offices. A two-story wing contains 52 instructional classrooms on two levels and the library.

Each wing is connected by two naturally lighted corridor stair towers. The site allows both floor levels in the two-story wing to have access at grade. The plan facilitates separation of grade levels by floors. Grades 4 to 6 are housed on the lower floor, and grades 7 to 8 are on the upper floor.

The exterior complements the adjacent high school by using similar masonry, metal and glass materials to create a visually unified campus. Both schools are situated on plateaus overlooking the athletic facilities and the wooded area sited between them. The 43.8-acre site also will allow for play areas, future ball fields and future building expansion.

Lexington Middle School
Lexington, Tennessee

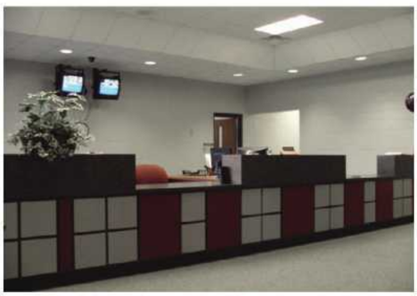


Kaatz, Binkley, Jones & Morris Architects, Inc.

Client:	Lexington City Schools; Joe T. Wood, Director of Schools
Capacity:	600
Space/student:	155 sq. ft.
Area:	93,400 sq. ft.
Total cost:	$7,939,000
Cost/square foot:	$85
Completion:	July 2006







This 28-acre campus, designed for grades 6 to 8, is in the heart of Henderson County, Tenn. Site amenities include an outdoor classroom and nature walk just above an existing wetland that utilizes excess dirt and topsoil from sitework.

The district and design team worked with the Tennessee Department of Environment and Conservation and environmental engineers to protect the adjacent wetlands. The construction includes masonry bearing walls and structural bar joists with a low-slope membrane roof. In addition to natural light in every classroom, the school has two large pyramid skylights at the main corridor intersections.

Every classroom includes the following: an interactive whiteboard, wireless microphone with surround sound, ceiling-mounted projector and outlets for five student computer workstations. The entire school is connected using a Voice over IP (VoIP) communication system with digital handsets in each classroom. The floor plan is arranged so that all main corridors can be observed from two locations.

Secure vestibules lead visitors into the main office before they are allowed access into the building. Electronic security features include keyless entry and digital cameras inside and outside the building.





Fairless Middle School
Navarre, Ohio





This facility houses grades 6 to 8 and is designed for 441 students. The building is divided into three small pods that are designed as separate wings for the sixth, seventh and eighth grades. The pods are organized around a courtyard that provides natural light to all classrooms and serves as a teaching lab for the science program.

The administration offices are adjacent to the main entry, which is well-defined by a canopy and a 1½-story foyer. The media center is designed with a separate entrance and its own restrooms so it can be shared with the public library and used by the community.

The building plan is divided into two major areas. One area contains all of the classrooms, special-education rooms, the media center, art room, project labs and administration. The other consists of the gymnasium, locker rooms, cafetorium and music rooms, and is designed as a separate wing to isolate the noisier functions from the classroom wing and to create a community-use area that can be secured for after-hours access.





Lesko Associates, Inc.

Design team:
Robert W. Blatchford Jr., President;
S.M. Ayat, Principal-in-Charge of Design

Client:
Fairless Local School District;
Mona Fair, Superintendent

Capacity:
441

Space/student:
151 sq. ft.

Area:
66,591 sq. ft.

Total cost:
$9,396,656

Cost/square foot:
$141.11

Completion:
August 2007

Photographer:
Hanson PhotoGraphic



Stonewall Jackson Middle School, Renovation and Addition

Orlando, Florida







Students, staff and visitors are delighted with the recent changes made to Stonewall Jackson Middle School. The design team worked closely with the Orange County Public School Board team to economically transform an outdated junior high school (originally constructed in 1964) into a modern middle school. The existing facilities on campus had been designed for 900 students and required updates to become a 1,348-station school.

Phase I included the construction of two new standalone buildings: a two-story classroom building (38,500 square feet) and a one-level cafetorium building (27,750 square feet) with music suites. The music suites include two spacious classrooms (vocal and band) and practice areas, which incorporate the latest in instructional technology. The new buildings were arranged to create a new courtyard and sightlines to enhance campus security.

Phase II of the project included the 128,000-square-foot renovation and remodel of the existing campus. During this phase, the team relocated the "front door" to a more appropriate location for accessibility and security, creating a dynamic new entrance to the campus. The team also transformed the original cafeteria into an exciting new media center for students.



Rhodes+Brito Architects

Design team:
Ruffin Rhodes, AIA, Principal-in-Charge; Byron Lastrapes, AIA, Project Manager/Designer

Client:
Orange County Public Schools; Ronald Blocker, Superintendent

Capacity: 1,348 stations	**Area:** 166,000 sq. ft.
Total cost: $19.4 million	**Cost/square foot:** $116.86
Completion: August 2007	**Photographer:** Phil Eschbach



Raymond B. Stewart Middle School
Zephyrhills, Florida



Williamson Dacar Associates, Inc.

Design team:
Ted Williamson, AIA, PE, LEED AP, Principal; George Tharin, Project Architect/ Manager; Rob Anston, PE, Electrical; Bill Weber, PE, Structural; District School Board of Pasco County

Client:
District School Board of Pasco County; Heather Fiorentino, Superintendent

Area:
96,188 sq. ft.

Total cost:
$19,556,518

Cost/square foot:
$203.32

Completion:
November 2007

Photographers:
Anthony John Coletti Photography; Aerial Innovations, Inc. (aerial)









The Raymond B. Stewart Middle School campus was established in 1926 with an eight-classroom, two-story building. Since then, the campus has expanded to 21 buildings and 1,100 student stations. The architect was challenged to respectfully replace facilities that have been part of a community for many years, but were past their useful lives. The architect initially evaluated all facilities on campus and developed a master plan for upgrading the campus to current district standards for instruction, technology and security. The architect's master site plan opened up the center of the campus around a courtyard with a linear arm extending out to the main classroom buildings. The administration, cafetorium, vocational, music and media center buildings were developed around the central courtyard.

The project was constructed in four phases over 30 months. The new building needed to be opened before demolition of the existing facility; therefore, phasing played an integral part of the site and building design. The replacement facility provides the citizens of Zephyrhills a neighborhood middle school in the heart of the city.



Somerset Intermediate School
Westover, Maryland





SHW Group LLP
Design team: Derk Jeffrey, AIA, Principal-in-Charge; Christen Robbins, Project Manager; ReStl Designers, Inc., Structural Engineer; Gipe Associates, Inc., MEP; Soule and Associates, PC, Civil Engineer; Nyikos Associates, Inc., Food-Service Consultant
Client: Somerset County Public Schools; Karen-Lee Brofee, Superintendent
Capacity: 600
Space/student: 130 sq. ft.
Area: 78,000 sq. ft.
Total cost: $17,666,211 (includes building and site-development costs)
Cost/square foot: $239.83
Completion: January 2008
Photographer: Vidyuta Rangnekar

The architect was charged with building a technology-oriented intermediate school to include a strong instructional program for 21st-century learning. It was to serve the entire community through recreation, after-school programs, community events, technology instruction and other adult-education programs, and become a model for other Maryland schools.

Somerset Intermediate School staff, students and community members were involved heavily in the planning process. When asked what they expected of the school, people answered, "Brick, like every other school. What else would it be?" The design team seized this opportunity to transform the mindset and expectations of the community. They demonstrated how architecture can influence and inspire learning, and contribute to the creation of a place that is authentic to its site. This school is a reflection of the rural community's investment in its future through the design of a one-of-a-kind facility for learning.

The result is a building enriched with daylight, the latest teaching technology, a geothermal heating and air-conditioning system, and other sustainable features that minimize operating costs. The flexible design can integrate technological advances easily. The building was sited to avoid Chesapeake Bay Critical Areas and wetlands, and to minimize disturbance to the existing woodlands.







West Brazos Junior High School

Brazoria, Texas









SHW Group LLP

Design team:
Jennifer Henrikson, AIA, LEED AP; Ruben Araujo, AIA; Luis Fernandez, LEED AP; Frank Kelly, FAIA

Client:
Columbia Brazoria Independent School District; Martha Buckner, Associate Superintendent

Capacity:
600

Space/student:
152.5 sq. ft.

Area:
91,500 sq. ft.

Total cost:
$9,931,000

Cost/square foot:
$108.54

Completion:
May 2006

Photographer:
Richard Payne

West Brazos Junior High School is on a 53-acre undeveloped, beautifully wooded site. The building's dominant material is concrete masonry, which was chosen for its natural, durable quality. Stucco and metal panels complement the masonry to make a more economical structure without compromising durability and maintenance concerns. Natural colors of beige, brown and rust, complemented by zero-maintenance clear, anodized aluminum and energy-efficient green tinted glass enable the building to blend with the natural beauty of the heavily wooded campus.

A 260-foot circulation spine connects multiple learning/activity pod centers that feature clerestory windows, allowing natural light to penetrate deep into the core spaces. Landscaped courtyards provide generous views. Classroom windows feature low-E glazing and inexpensive shading devices that double as light shelves, distributing natural light further into learning spaces. The site consists of rain-water detention and natural filtration areas, and naturally preserved landscapes that are drought-resistant and thrive in the regional coastal environment.

West Brazos Junior High School is the first public school in Texas to receive LEED certification.

Brown Middle School
Forney, Texas



WRA Architects, Inc.

Design team: Jeffrey C. Miller, AIA, LEED AP, Principal-in-Charge; Lorenzo Navarrete, AIA, Project Manager	
Client: Forney Independent School District; Darrell Brown, Superintendent	
Capacity: 850	**Space/student:** 159 sq. ft.
Area: 135,495 sq. ft.	**Total cost:** $17,132,587
Cost/square foot: $126.44	**Completion:** July 2006
Photographer: Grady L. Frank	

Brown Middle School in the fast-growing Forney Independent School District, just east of Dallas, is Forney's second middle school but its first new middle school in many years. The district's other middle school has been renovated to bring it into parity with Brown.

Brown was designed with the community in mind. The atrium just inside the front entry connects directly to the cafeteria and gym, which are central to the plan and serve as pre-function gathering places for the entire building, for students as well as after-hours community events. The simple circulation diagram not only is economical in minimizing the square footage of the footprint and roofing, but also is navigated easily. The efficient plan allows extra-wide corridors, which have reduced disruption in the passing periods and provide a safer, more secure building.

The brick colors were inspired by nearby public and amenity buildings that were built of local orange-red stone. More than 85 percent of the roof is standing-seam metal. The school is equipped with fiber optics, wireless access and laptops. Forney ISD also has instituted an e-textbook program.









Dr. James P. Terry Middle School
Mesquite, Texas









WRA Architects, Inc.

Design team: Tony C. Apel, AIA, CSI, Principal-in-Charge; Keith Anderson, AIA, Project Manager	
Client: Mesquite Independent School District; Linda Henrie, Superintendent	
Capacity: 1,000	**Space/student:** 139 sq. ft.
Area: 138,507 sq. ft.	**Total cost:** $18.8 million
Cost/square foot: $135.73	**Completion:** July 2006
Photographer: Grady L. Frank	

James Terry Middle School is designed to serve grades 7 and 8, but with a unique configuration: In this fast-growth area, it also will house sixth-graders temporarily until new elementaries are built, so the architect configured the building to keep sixth- and eighth-graders separated.

Creative floor planning accommodates simultaneous, but separate after-hours events in the gymnasium and cafetorium. The cafetorium is directly inside the main lobby with convenient restrooms. The secondary entrance leads directly to the gymnasium and has separate public restrooms. Both areas also can be reached inside the building from either entrance.

Different areas of the building—classrooms, fine arts, the gymnasium, library and lobby—all have different skins on the building exterior, yet are tied together by a curved red masonry wall accentuating the two main entrances.

The project includes 30 classrooms; six science labs; two computer labs; a technology lab; a special-education suite; separate rehearsal halls for band, orchestra and choir; an art classroom; a family and consumer science classroom; library; gymnasium with seating for 1,000; cafetorium and weightroom; kitchen with four serving lines; administration office suite; ISS classroom; track and football field; practice field; softball field; tennis courts; and parking for 298 cars.

Glades Middle School
Miramar, Florida



Zyscovich Architects

Design team:
Jose Murguido, AIA, Principal-in-Charge; Michael Ehrling, Architectural Designer; Elaine Rodriguez, ASID, Interior Designer

Client:
The School Board of Broward County; Michael Garretson, Facilities and Construction Management

Capacity:
1,998

Space/student:
117 sq. ft.

Area:
234,000 sq. ft.

Total cost:
$36 million

Cost/square foot:
$153.85

Completion:
December 2005

Photographer:
Morris Moreno Photography







Designed as a 2,100-student station prototype, Glades Middle School is composed of three buildings organized around a central gathering courtyard with a defined sense of entry. Two academic buildings contain general classrooms, skills, health, consumer science, business and science labs, the administration suite and media center. The house concept within the school allows each grade level to be designated in its own area of the buildings. Common areas for students and faculty are provided at the building center for convenient access and allow teaching areas to have the greatest amount of natural-light exposure. The assembly building is designed to become a community resource, as its operation easily facilitates after-hours use without opening the entire school to the public.

Additionally, the compact school design enables the site field and green areas to be maximized, enabling enhanced community use with adjacent parks. The central courtyard, open green spaces and park settings provide numerous external learning opportunities that enable students to be physically active, and to interact with the community and natural world around them.





HIGH SCHOOLS

CITATION



VCBO Architecture
Syracuse High School
Syracuse, Utah .... p. 96-97

"We love the flexibility and adaptability of the main space. Nice job of technology integration. Good use of durable materials."

—2008 Jury



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OUTSTANDING HIGH SCHOOLS



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Syracuse High School
Syracuse, Utah



VCBO Architecture
Design team: Boyd McAllister, AIA, Principal-in-Charge; Celestia Carson, AIA, LEED AP, Project Architect; Dan Nelson, Associate AIA, Project Manager
Client: Davis County School District; Bryan Bowles, Superintendent
Capacity: 2,000
Space/student: 192 sq. ft.
Area: 383,000 sq. ft.
Total cost: $38 million
Cost/square foot: $99
Completion: August 2007
Photographer: Paul Richer/Richer Images

Davis School District's eighth high school is situated on a 50-acre site in Syracuse, one of the fastest-growing cities in Utah. This new high school has 383,000 square feet of learning spaces.

The design objective was to create a new school image to students and the community through a distinct campus and aesthetic appeal. By creating small learning communities as the core of the facility, the design converts the large student population into a collection of learning academies, each of which is centered in a collaboration area where learning can continue after class.

The school incorporates current technology, but also was designed with the flexibility to accommodate the technology of tomorrow. Computer labs are situated throughout the building, and nine 32-station mobile wireless labs, consisting of two carts of 16 laptops each, are in each of the school's learning academies. Teachers can use these technology resources for a variety of learning and studying exercises. Wireless access points provide connectivity to the school's network from anywhere in the building.











"We love the flexibility and adaptability of the main space. Nice job of technology integration. Good use of durable materials."

—2008 Jury













Belvidere North High School
Belvidere, Illinois



ATS&R Planners/ Architects/Engineers

Associated firms: Clark Engineering; Rettler Corporation; Richard L. Johnson Associates, Inc.

Design team:
Ken Grabow, AIA, Planner; David M. Maroney, AIA, NCARB, Principal-in-Charge/ Project Manager; Mark G. Hayes, AIA, Project Architect; Terry L. Stofferahn, PE, Mechanical; Gaylen D. Melby, PE, Electrical; Dan T. Cincoski, RCDD/CDT, Technology; Rettler Corporation, Site Development; Kim Sorenson, Interior Design

Client:
Belvidere Community Unit School District 100; Donald Schlomann, Superintendent

Capacity: 2,000	**Space/student:** 159 sq. ft.
Area: 318,000 sq. ft.	**Total cost:** $44.2 million
Cost/square foot: $140	**Completion:** July 2007

Photographer:
Mike Crews











This new high school was designed for an evolving, rural-based community experiencing rapid growth and needing flexibility to support changing education programs.

The building contains four classroom houses, each with teacher work areas, restrooms and student lockers that are situated centrally around a media center and various specialized labs. Flexible learning areas, administration areas and classrooms are carpeted for acoustics, low maintenance and visual warmth.

Bright school colors were used in athletic areas, which include a four-station gymnasium with wood flooring on the main court, a synthetic running track, wrestling room and weight/fitness room.

To encourage community use while maintaining student safety, the facility has various distinct, secure, separate entries for school activities and community use.

Warm paint tones with classic accents and cherry woodwork add softness and warmth throughout the building. Timeless, durable and low-maintenance flooring was used in high-traffic areas. Color accents were used for wayfinding and visual interest throughout the circulation.

Energy performance was a priority in the design through the use of high-quality roof insulation; insulated, high-performance glass windows; and a computer-controlled heating and cooling system.

William G. Enloe High School
Raleigh, North Carolina



BJAC, pa

Design team:	CLH Design, PA; GKC Associates, PA; Faithful-Gould, PA; Stanford White, Inc.
Client:	Wake County Public School System; Beth Cochran, Principal
Area:	150,000 sq. ft.
Total cost:	$24,186,000
Cost/square foot:	$161.24
Completion:	September 2007
Photographer:	Jerry Blow Architectural Photography



Enloe High School is a 2,300-student school serving grades 9 to 12. Although it has received national recognition for its magnet programs, the goal for this project was to provide a facility that would assist the administration and staff in their efforts to "raise the bar."

The plan addressed the need for additional classroom areas, while recognizing the constraint of an existing campus split by a natural ravine. The agreed-upon solution uses the west campus for instructional areas and the east campus for athletic programs.

The architect constructed a three-story classroom building on the west campus. This addition included an exterior courtyard, lab space, classrooms and a monumental stair.

Classroom areas were integrated into academic clusters, allowing multiple disciplines to be close to one another. This clustering helped the administration achieve its goal of new heights in academia.

Sustainability also is an essential aspect of the project, and the focus was on daylighting and energy efficiency. Sunshades are used on many of the building's windows.





Rochester Junior/Senior High School Additions

Rochester, Illinois







The existing Rochester Junior High School shared athletic, food service, art, music and industrial-technology facilities with the district's high school on a common site. This arrangement allowed both facilities to offer a wider variety of programs, but the inconvenience of the remote buildings led to frequent delays and security issues. The demand for new space in the rapidly growing district, as well as the need to replace the aging junior high facility, presented an opportunity to solve these issues.

A master plan was developed that would replace the existing junior high school and various standalone buildings with one new building. This plan allows the high school to add space, including a new fine-arts wing with a performance auditorium. The existing gym and cafeteria now are linked physically with the high school and junior high for the first time.

The new junior high has its own entrance and identity, and maintains the program space while limiting the exterior walls. This enables the junior high program to include more common-use space, and enables more of the site to be available for playing fields and parking. The colorful, sunlighted corridors of this new complex provide a warm and exciting place for students.



BLDD Architects, Inc.

Design team:
Steven Oliver, AIA, LEED AP, President/Project Manager;
John Whitlock, AIA, LEED AP, Associate/Project Architect;
Todd Cyrulik, AIA, Associate/Project Designer;
Ryan Jacobs, AIA; Tony Croslow

Client:
Rochester CUSD No. 3A; Thomas Bertrand, Superintendent

Area:
91,500 sq. ft. (new); 9,200 sq. ft. (remodel)

Total cost:
$17,480,000

Cost/square foot:
$173.58

Completion:
January 2008

Photographer:
Ben Halpern Photography

Appoquinimink High School
Middletown, Delaware







Buck Simpers Architect + Associates, Inc.

Design team:
Buck Simpers, AIA; Bruce Watts; Tony Vassalotti; Kristen Biagini; Wayne Tulli, Kathy Knotts

Client:
Appoquinimink School District; Tony Marchio, Superintendent

Capacity:
1,600

Area:
210,000 sq. ft.

Total cost:
$42 million

Cost/square foot:
$200

Completion:
August 2008

Photographer:
Charles Uniatowski





This 210,000-square-foot high school is designed for a capacity of 1,600 students. The plan is organized into wings that can be expanded to meet future growth. The design focused on light, acoustics and indoor air quality to provide maximum flexibility.

The design provides public access to the media center, administration offices, an 800-seat auditorium, and a 2,000-seat gymnasium after normal school hours for school and community programs. It also offers a creative solution for large-group activities by situating the cafeteria, commons area, auditorium and gymnasium adjacent to one another.

The separation of ninth-graders facilitates the transition from middle to high school. The state-of-the-art auditorium includes fly space and large-group instructional areas situated in the back with movable partitions. The layout features a "Main Street" concept that links the building's programmatic elements.

The building's design incorporates green initiatives typified by the LEED rating system, including lighting-control monitors and high-efficiency plumbing fixtures. The lighting-control monitors saved the district more than $100,000 just during construction.

The building site gives consideration to natural light, prevailing winds and existing preserved wetlands. The building is positioned away from the road so traffic noise does not affect the learning environment.

Hillgrove High School
Powder Springs, Georgia









Chapman Griffin Lanier Sussenbach Architects, Inc. (CGLS)

Design team: Robert S. Sussenbach, AIA, NCARB, Principal-in-Charge; Rebecca Tyson, AIA, RA, Project Manager; Marian Reeves, AIA, RA, NCARB, LEED AP, Project Architect	
Client: Cobb County Public Schools; Joe Boland, Principal	
Capacity: 1,962	**Space/student:** 165 sq. ft.
Area: 323,000 sq. ft.	**Total cost:** $32,416,500 (building and site)
Cost/square foot: $100.36	**Completion:** May 2006
Photographer: Fred S. Gerlich Studios	

Designed from an award-winning prototype, this state-of-the-art, 323,000-square-foot Cobb County high school was designed to meet the growing needs of the district. The two-story floor plan emphasizes the range of curriculum opportunities, and establishes logical areas for efficient use of support and staff resources.

The "Main Street" corridors that run the length of the school on both floors, along with the indoor and outdoor student common areas and central courtyard, create an exciting environment for learning within the context of building a community. Specialized spaces and equipment have been included in the building to support the school's career technology programs, such as culinary arts, graphic communications, broadcast and video production, and healthcare-science technology.

The building structure is a lightweight steel frame with a composite elevated floor slab. The combination of brick veneer over concrete masonry, and an exterior insulation and finish system provide an easily maintained, durable exterior. The majority of the building is heated and cooled with water-source heat pumps, and rooftop units provide flexibility for spaces used after school hours.

The Potomac School, The Potomac Upper School
McLean, Virginia







Cox Graae + Spack Architects

Design team:
David Cox, Joanna Schmickel, Derek Banocy, Chris Ambridge, Jenny Kirwan, Robin Romano

Client:
The Potomac School; Geoffrey Jones, Head of School

Capacity:
425 (students); 50 (faculty)

Space/student:
254 sq. ft.

Area:
108,000 sq. ft.

Total cost:
$27 million

Cost/square foot:
$250

Completion:
September 2006

Photographers:
Craig Kuhner; David Cox; Jeffrey Sauers

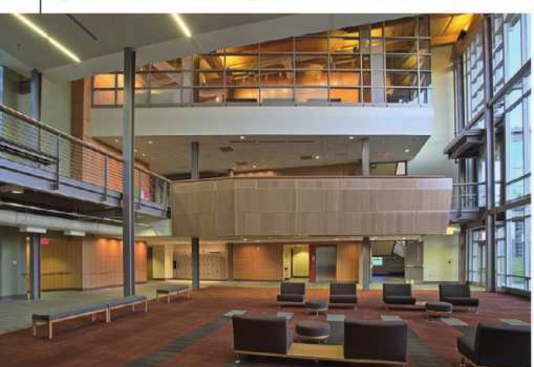
A significantly larger, new Upper School campus replaces the formerly isolated, undistinguished, 1980s structure. The clearly defined new architecture unifies the Upper School educational environment and connects it to the outdoor landscape.

The new campus is linked to the existing campus circulation by an expansive terraced quadrangle and an L-shaped building that incorporates the two older structures. Placed alongside the existing gym, the two-story classroom wing establishes a welcoming presence with fieldstone, glass curtainwalls and wood laminated roof beams.

Students enter a sequence of syncopated spatial experiences meant to simulate a lively, outdoor walk through an urban neighborhood. After crossing a glass bridge, they must pass through the central village square or "Crossroads" to reach all other parts of the school, including adjacent classrooms, a library, dining hall and theater. The 40-foot-high, glass-walled Crossroads serves as the central meeting place.

The contemporary new Upper School maintains a harmonious relationship with the original campus architecture by incorporating similar shed and flat roofs with pale yellow stucco walls. The new buildings, however, emphasize clear structural expression, wall-plane modulation, full-height glass walls and integration of landscape with the architecture.







Bethlehem High School, Renovation/Addition
Delmar, New York



CSArch Architecture/Construction Management

Design team:
Paul E. Scoville, AIA, Principal-in-Charge; Richard L. Peckham, AIA, Managing Principal; Paul Benoit, AIA, Design Architect; Thomas Kenney, AIA, Project Architect; William Pennock, AIA, Project Architect; Daniel Gorski, Interior Designer; Andrew Neubauer, AIA; Christopher Persbacker; Melissa Renkawitz; Dina Leone

Client:
Bethlehem Central School District; Les Loomis, Superintendent (retired); Michael Tebbano, Superintendent

Capacity:	Space/student:	Area:
1,800	196 sq. ft.	90,500 sq. ft. (additions)
Total cost:	**Cost/square foot:**	**Completion:**
$34 million	$195 (additions)	September 2007

Photographer:
Donald Thomas



The 90,500-square-foot expansion and renovation of Bethlehem High School was designed to accommodate an increased student population and enhanced curriculum requirements. It was part of a $93 million districtwide capital project to reconfigure Bethlehem Central School District.

An inviting main entrance and lobby area were designed to welcome students, teachers and visitors, and provide a space to congregate between classes or during after-school events. Corridors were designed to improve circulation and create open areas for students to gather.

Changes in curriculum required existing spaces to be updated for enhanced learning. New program spaces include orchestra, chorus, science and math rooms, as well as 20 general classrooms. A new two-station gymnasium, fitness center, team locker rooms and two new athletic fields were designed to accommodate physical-education and sports needs. The cafeteria was renovated to create an open patio for outdoor dining. The photography room was expanded to create a separate darkroom and photo-shoot area.

Technology was updated throughout the building. Each classroom has an overhead projector, and additional electric/data capacity was provided to accommodate future technology.





Betty Fairfax High School

Laveen, Arizona



DLR Group

Design team:
Karl Derrah, AIA; Tom O'Neil, AIA

Client:
Phoenix Union High School District;
Art Lebowitz, Superintendent

Capacity:
2,400

Space/student:
143.75 sq. ft.

Area:
345,000 sq. ft.

Total cost:
$63 million

Cost/square foot:
$182.60

Completion:
August 2007

Photographer:
Mark Boisclair

When Phoenix Union High School District decided to embrace the small-school movement, administrators realized they would need a new high school to alleviate crowding. Betty Fairfax High School was designed to deliver the promise of a small-school environment on a large school campus.

The design clusters classrooms into four separate schools, while providing collaborative space for students and staff. Each small learning community (SLC) includes administration, counseling, media services and a large gathering area to accommodate the population of each individual school.

Desert flowers beneath a mountainous landscape inspire the school's bold forms, materials and colors, and extensive windows maximize daylighting and reveal the scenic backdrop. Sustainable features include a high-performance building envelope, low-maintenance systems and native landscaping materials.

A neighborhood street connects the entire campus, each school with its own address, storefront presence and informal gathering spaces. With an encouraging sense of community, the school delivers a rich learning environment where students are driven and empowered to succeed.

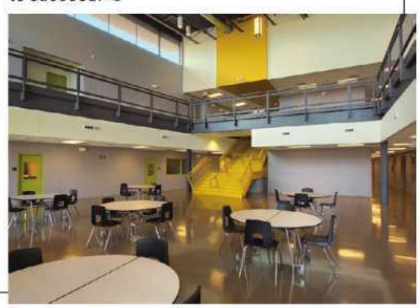












Glacier High School
Kalispell, Montana



CTA Architects Engineers

Associated firm: DeJongLocker

Design team: David Mitchell, Corey A. Johnson, Sean Fitzpatrick, Brad Sperry, Stacey Campbell, Ben Wardell, Stephen Smith, Carl Maehl, Rick DeMarinis, Nathan Ratz, Frank Locker		
Client: Kalispell School District 5; Darlene Schottle, Superintendent		
Capacity: 1,380	**Space/student:** 176 sq. ft.	**Area:** 242,665 sq. ft.
Total cost: $31,452,227	**Cost/square foot:** $129.61	**Completion:** June 2007
Photographers: Karl Neumann; gravityshots.com (aerial)		

Glacier High's warm and inviting appearance truly captures student and community imagination with its unique and reflective mountain valley image. Oriented to face the snow-capped peaks of Glacier National Park, the design emulates the regional mountainous materials and forms. The building position brings daylighting into classrooms and captures impressive panoramic views of the surrounding mountain ranges and Glacier peaks. The design also uses energy-saving strategies, such as biomass heating and free cooling, to lower operational costs. Dynamic spaces, good indoor air quality, plenty of daylight and sophisticated color palettes make the facility a truly remarkable warm and healthful learning environment.

The large centralized Glacier Center is the most dynamic social space in the facility. This two-story area with high vaulted ceilings, warm heavy-timber wood trusses and stone colonnades is used for many activities. All student services lead to and from this hub. Students enjoy lunch at the food court, and this flexible commons area also serves as the primary lobby and concessions space for all public events in the gymnasium, performance hall and Wolfpack Theatre. School dances, pep rallies, assemblies, public meetings, speakers and diplomats all have used this warm and inviting town-square forum. Glacier High's inviting, yet controlled entrances engage the surrounding neighborhood with activities throughout the day and evening, fostering partnerships with the community college, private businesses and city organizations.

Because Glacier High School is divided into smaller learning communities, students are engaged actively in their education, apply what they learn more comfortably, and receive more personalized attention from their peers, mentors and teachers. Each small community is composed of multi-sized collaborative learning areas, small locker pods, and teacher planning and resource spaces.

One learning community is Team Avalanche, Glacier High's Freshman Academy, providing a nurturing environment that caters to the educational, emotional and social needs of freshmen.







"To say we are extremely pleased with the facility design is an understatement! The flexible design has been the single most important factor in facilitating our development of effective teaching practices for the 21st century. In addition, the warm, inviting, student-friendly environment has had a major impact on our positive school climate."

—Callie Langohr, Principal







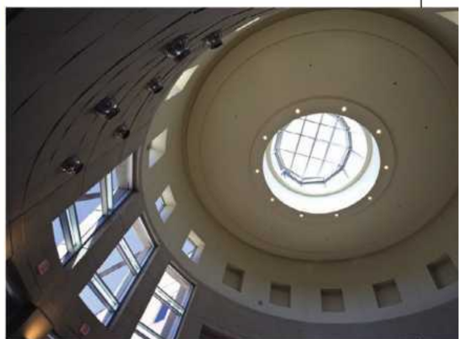




Phillis Wheatley High School
Houston, Texas









ESPA Corp, Inc.

Design team:
Willie C. Jordan Jr., AIA, Project Architect; Heath Gray (deceased); Will Wong; Shawn Fontenot; Derrick Vaughn

Client:
Houston Independent School District; Abelardo Saavedra, Superintendent

Capacity:
1,200

Space/student:
195.08 sq. ft.

Area:
234,097 sq. ft.

Total cost:
$35,050,000

Cost/square foot:
$149.72

Completion:
June 2007

Photographer:
John Cooper





Phillis Wheatley Replacement High School is an inner-city school in the Fifth Ward of Houston. It was designed to house 1,200 students on a 13.58-acre tract of land originally occupied by a three-story facility that had capacity for 2,500 students.

The school is part of an interlocal partnership of the Houston Independent School District, The City of Houston and Harris County Precinct No. 1, which maximizes land utilization, building usage and shared facilities such as the public pool, city recreation fields and the school's auditorium for after-hours community programs.

The new building includes a rotunda, commons, kitchen, culinary-arts laboratory, administration cluster, resource center, classrooms, science/physics laboratories, computer rooms, athletics, two gymnasiums, a weightroom, band/orchestra rooms, an auto-mechanics area and ROTC cluster. A new athletic field with other support facilities was installed after demolition of the existing building.

The building integrated two tones of brick masonry, used on the existing auditorium and adjoining neighborhood buildings, to completely unify the community. The design incorporated many sustainable elements.

Lawrence High School
Lawrence, Massachusetts



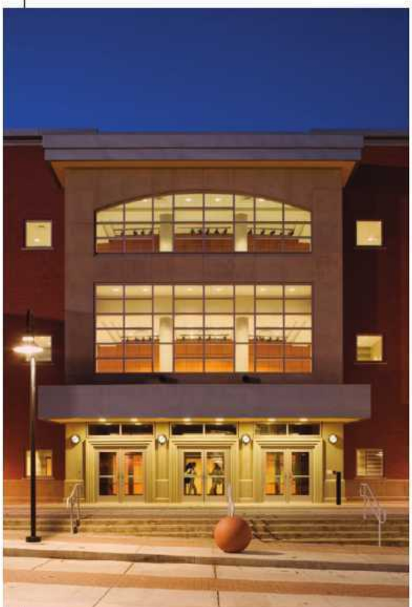
Flansburgh Architects

Design team:	
Earl R. Flansburgh, Principal-in-Charge; Jorge M. Cruz, Project Manager; Dominic Pedulla, David Croteau, Project Architects; Laurie Barton, Interiors; Sam Bird, Construction Administration	
Client:	
Lawrence Public Schools; Wilfredo T. Laboy, Superintendent	
Capacity: 3,000	**Space/student:** 188 sq. ft.
Area: 565,000 sq. ft.	**Total cost:** $82 million
Cost/square foot: $145	**Completion:** September 2007
Photographer: Robert Benson Photography	

How can an industrial city realize a post-industrial vision of education? Lawrence created six 500-student learning communities, each with its own headmaster, to form the new 3,000-student Lawrence High School campus. These individual academies enable students to explore their interests in business, health services, humanities and leadership, international studies, sciences or the arts.

Referencing the waterways that united the mills of industrial-era Lawrence, a curvilinear spine links all six academies to shared resources of the commons, media center, central administration building, fieldhouse and performing-arts center. The commons serves as a major indoor gathering space where students of different academies come together. The performing-arts center serves a community arts group, and four daycare centers support faculty and student parents.

The architecture of the academies recalls the mill buildings of the past. Each brick-clad academy is constructed economically of reinforced concrete block and precast plank. The spine is covered in polished zinc panels that create the illusion of water in motion. This internal thoroughfare encourages faculty and students to interact between classes.









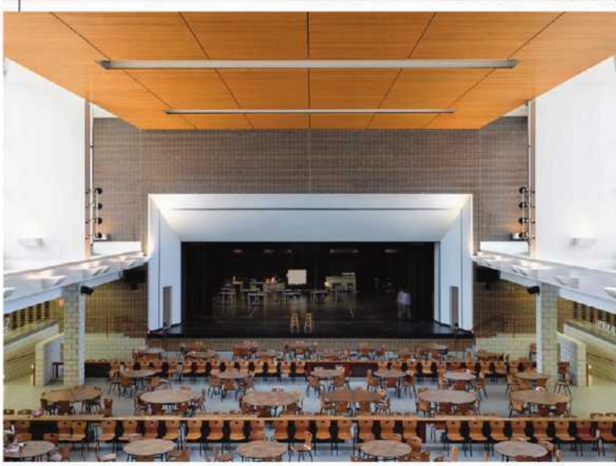


Parker High School
Howell, Michigan









Parker High School is designed for extended use, with self-contained learning areas, individual academies and common areas operating during the evening, a media center open during weekend hours, and business partnerships keeping a schedule independent of the school.

Students at Parker can maintain unique schedules, and a student commons provides space for studying, dining and waiting between classes. The commons also houses a fully functioning black-box stage. The loft is complete with comfortable seating and network connections. The administrative offices, media center, staff-less school store and athletic complex are accessible from the commons. The media center, accessible from all zones, enables resources to be used during extended hours. Academic areas around the perimeter of the media center are available for students and teachers to use as a support space for lessons. Six learning academies accommodate the individual learning styles of each student, a benchmark of the innovative philosophy championed by district leadership.

Parker's athletic fieldhouse provides two gymnasiums, a natatorium, weightrooms, stadium with grandstand, running track, football/soccer field, ball fields, tennis courts and additional practice fields.

French Associates, Inc. and Perkins+Will

Design team:
Paul Corneliussen, Principal-in-Charge; Dan Jerome, Project Manager; John Waldrop, Matt Gielow, Project Architects; Jerry Johnson, Design Principal; Mike Palmer, Project Planner

Client:
Howell Public Schools; Rick Terres, Assistant Superintendent

Capacity: 1,600	**Space/student:** 184.35 sq. ft.
Area: 294,964 sq. ft.	**Total cost:** $58,732,298
Cost/square foot: $199.12	**Completion:** August 2007

Photographer:
Steve Maylone/Maylone Photography

John Marshall High School
Oklahoma City, Oklahoma



GSB, Inc. Architects & Planners

Design team:
Ronald Smith, AIA, Principal-in-Charge; Michael Hinchey, AIA, Principal/Director of Design; Ryan Eshelman, RA, LEED AP, Associate/Design Architect; Phil Elwell, RA, Senior Associate/Project Architect; Paul Nybeck, RA, CSI, CCS, CCCA, Senior Associate/Specifications Architect; Steve Tresemer, RA, Associate/Construction Administration

Client:
Oklahoma City Public Schools; Sandra Park, Acting Superintendent

Capacity:
1,000

Area:
176,117 sq. ft.

Total cost:
$20,410,000

Cost/square foot:
$115.88

Completion:
August 2007

Photographer:
Mark Knight









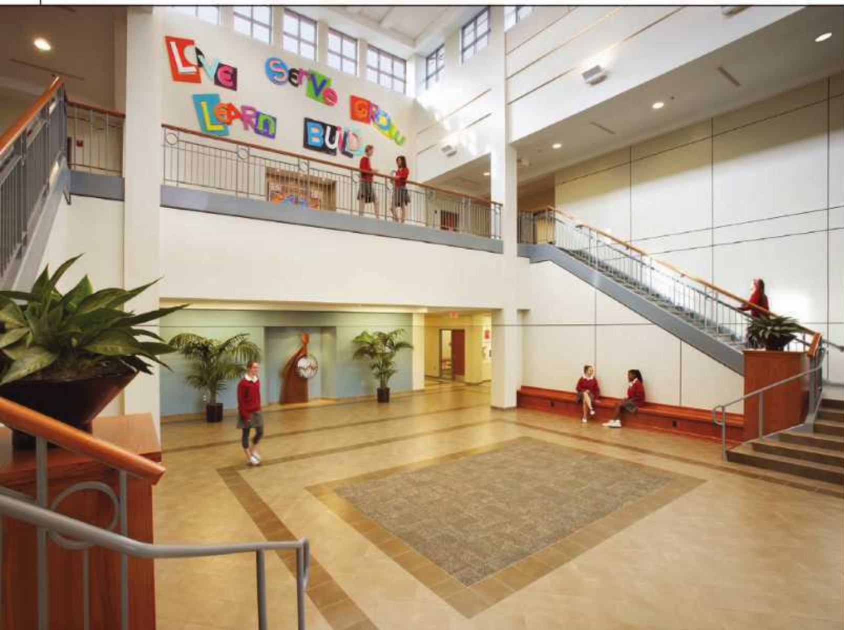
As a part of the MAPS for Kids program, the Oklahoma City Metropolitan Area Public Schools Trust commissioned the new John Marshall High School to serve the students of the Oklahoma City Public School District.

This 176,117-square-foot facility for grades 7 to 12 replaces the aging school of the same name.

This 1,000-student high school is a flexible learning environment capable of adapting to various teaming strategies, changes in the curriculum and modifications of the student population.

Featuring daylighted classrooms, it incorporates the latest instructional technology, a state-of-the-art media center, fine-arts facilities and athletic facilities. It is designed to support the school's long-standing tradition of excellence and to prepare its students for the future.

Barat Academy
Dardenne Prairie, Missouri









Hastings & Chivetta Architects, Inc.

Design team:
Christopher Chivetta, Principal-in-Charge; Dennis Lammert, Project Manager; Jeff O'Brien, Design Architect

Client:
Barat Academy; Debra L. Watson, President

Area:
191,375 sq. ft. (all building phases)

Total cost:
$35,151,760 (construction)

Cost/square foot:
$183.68

Completion:
July 2007

Photographers:
Fentress Photography; Hastings & Chivetta

Barat Academy is the first private, independent, Catholic high school in St. Charles County, and its leaders wanted the site to be unique: single-gender education on a co-educational, highly motivating campus that supports lifelong learning and service.

The location is adjacent to a 173-acre park; the Barat Haven community of houses, offices, retail establishments and a hospital; and across from Busch Wildlife Sanctuary. The architect was commissioned to design a school that would enhance the neighborhood components, yet advance nearby educational opportunities.

After designers developed a careful master plan, the first phase was completed by fall 2007, in time to educate the founding freshman class of 82 students. Other phases will accommodate additional classes. The school eventually will hold 600 students in grades 9 to 12.

The two-floor, 70,000-square-foot Founders Building is the main academic hall and consists of a large lobby and chapel, as well as 60 classrooms, eight science laboratories with two prep rooms, administration and development offices, a bookstore, library with high-tech media center, IT department and eight breakout study rooms.

Remaining phases include a food-service and dining building, and a fine-arts and physical-education center. Art studios will include spaces for orchestra, band, chorus, ceramics, painting and graphic arts. The P.E. department will have a performance gym with seating for 750 spectators, and separate boys' and girls' state-of-the-art weight/fitness centers and locker rooms, a classroom, storage and faculty offices. The school offers cross country and soccer for boys, and field hockey, volleyball, cross country and golf for girls.

Bishop Gorman Catholic High School
Las Vegas, Nevada



KGA Architecture

Design team:	Ed Kittrell Jr., George Garlock, Craig Forrest, Mark Danley, Lee Norsworthy, Kent Jones, Craig Lucas
Client:	Roman Catholic Diocese of Las Vegas; Richard Facciolo, C.A.O., Chancellor
Capacity:	1,200
Space/student:	188 sq. ft.
Area:	226,114 sq. ft.
Total cost:	$93 million
Cost/square foot:	$411
Completion:	September 2007 (Phase I)

After more than 50 years at a cramped downtown site, Southern Nevada's only Catholic high school moved to a much larger, 35-acre campus that included its first on-site sports complex. Educational activities are conducted in three main structures: an administration building, chapel, and the education and event building, all grouped around four distinct courtyards. These courtyards pay reverence to courtyards in Catholic monasteries; offer a protective, calming environment; and serve to separate purely educational areas from more public spaces.

Four distinct learning modules are the product of the education program: humanities, science, arts and general studies. The modules also are linked directly to the strategically situated centers of student life—the library and commons. Connectivity among classrooms, public spaces and courtyards was paramount in providing a well-rounded educational experience. In addition, each space, whether interior or exterior, was scrutinized carefully to provide maximum flexibility in order to meet the needs of today, as well as future needs. Architectural materials enhance religious connotations and reflect the school's arid climate context.









Fair Lawn High School
Fair Lawn, New Jersey





LAN Associates, Engineering, Planning, Architecture, Surveying, Inc. (LAN)

Architect of Record:
Kenneth H. Karle, RA, PP, PE, President

Design team:
James L. Sanders; Kim V. Vierheilig, RA

Client:
Fair Lawn Board of Education; Bruce Watson, Superintendent

Capacity:
1,700

Area:
98,000 sq. ft. (new construction/renovation)

Total cost:
$17.8 million

Cost/square foot:
$240 (new construction)

Completion:
September 2006

Photographer:
Thomas H. Kieren/Custom Corporate Photography

The architect worked with the school board to develop long-range plans, educational specifications, conceptual designs and cost estimates for the Fair Lawn High School project. The firm also provided assistance to obtain state funding and education department approvals, and assisted with the referendum process.

The scope of work for the 48,000-square-foot addition included 13 new standard classrooms, six new science rooms, a new media center/computer lab, a new band room and an expanded cafeteria. The two-story addition completed corridor circulation between two existing wings of the school. Part of the design incorporated a new, clearly visible main entrance from the rear parking lot, as well as a secondary entrance to the gymnasium adjacent to the athletic fields.

The new cafeteria was designed with natural light in mind. The design also ties the cafeteria into outdoor courtyard seating formed by the new addition. The brick on the new structure blends with the original building, and the beige metal panels were designed to fit with a later addition on the other side of the school. The burgundy standing-seam metal roof wraps the perimeter of the new addition to disguise the HVAC units.





The project scope also included about 50,000 square feet of renovations to the existing main office, science wing, guidance offices, child-study team offices, weightroom, wrestling room and classrooms.

Liberty High School
Peoria, Arizona





NTD Architecture	
Design team: Scott Beck, AIA, REFP, Project Principal	
Client: Peoria Unified School District; Denton Santarelli, Superintendent	
Capacity: 1,800	**Area:** 237,000 sq. ft.
Total cost: $36 million	**Cost/square foot:** $152.28
Completion: March 2005	**Photographer:** Ross Cooperthwaite











Liberty High School is the seventh high school built within Peoria Unified School District and serves one of the valley's and nation's fastest-growing cities.

This 237,000-square-foot campus is a comprehensive facility built to accommodate up to 1,800 students in grades 9 to 12. The buildings surrounding the central courtyard are single-story, with the exception of a two-story academic building, which includes the media center and administration components.

Additional features include a gymnasium building, a performing-arts center/commons building, a career and technology building, and two concessions/restroom buildings.

The architectural style or image of the buildings is described as a modern/high-tech "academic village" or "learning community." This is illustrated in the circular design of the central courtyard and its incorporation of an amphitheater. Students and faculty will use this space for outdoor instruction, forums and rallies, performances, as well as outdoor dining. In congruence with the campus' site layout, the drainage pattern is respectful of the site's natural topography and flows with its natural slope. School amenities were developed around this concept, with ball fields placed near water-retention areas, and building and student dropoff areas placed at higher elevations.

Carrboro High School
Carrboro, North Carolina









Moseley Architects, PC

Design team: James Copeland, AIA, REFP, LEED AP, Managing Principal; Steven Triggiano, AIA, LEED AP, Project Manager; Brian Rider, Associate AIA; Melissa Herald, IIDA, LEED AP; Stephen Nally, Construction Administrator	
Client: Chapel Hill-Carrboro City Schools; Neil Pedersen, Superintendent; Bill Mullin, Director of Facilities Maintenance	
Capacity: 800 (students); 1,200 (core)	**Space/student:** 185 sq. ft.
Area: 148,023 sq. ft.	**Total cost:** $26,085,701
Cost/square foot: $176.90	**Completion:** August 2007
Photographer: Brian Dressler/dresslerphoto.com	

Serving as a model of sensible energy use, environmental protection and community stewardship, Carrboro High School places a gentle footprint on North Carolina's Orange County. The building was designed according to Chapel Hill—Carrboro City Schools' "High Performance Building Design Criteria" policy, which emphasizes energy conservation, water reduction, high-efficiency lighting and healthful indoor air quality.

The result is not only a state-of-the-art green facility, but also a school that is comfortable for students and staff, and aesthetically in sync with the architectural character of the town of Carrboro.

Sustainable highlights: three 35,000-gallon cisterns collect filtered rainwater for toilets; retention ponds catch overflow for landscape watering; classrooms, the gymnasium, media center and cafe/commons boast large windows to harvest daylight; fluorescent lights supplement daylight on rainy days and nights; and light and occupancy sensors turn lights on and off automatically.

Helping to keep Carrboro cool and the surrounding vegetation healthy, the school's roof incorporates an Energy Star-compliant, highly reflective membrane. Solar energy preheats water; photovoltaic panels convert light into electricity for mechanical room motors. Building materials were obtained from regional manufacturers, and more than 90 percent of the construction was recycled.

Carrboro is the first high school in North Carolina to receive a LEED silver rating from the U.S. Green Building Council.

Nation Ford High School
Fort Mill, South Carolina



Moseley Architects, PC

Design team: Daniel Mace, AIA, LEED AP, Managing Principal; Jimmy Wilhide, AIA, LEED AP, Project Manager	
Client: Fort Mill School District-York Four; V. Keith Callicutt, Superintendent; "TEC" Dowling, Former Superintendent	
Capacity: 1,500 (students); 1,800 (core)	**Space/student:** 166 sq. ft.
Area: 249,500 sq. ft.	**Total cost:** $30,391,043
Cost/square foot: $121.81	**Completion:** May 2007
Photographer: Brian Dressler/dresslerphoto.com	



Serving South Carolina's fastest-growing district, the gleaming, high-tech Nation Ford High School promises a bright future and uniquely reflects Fort Mill's historic identity.

Design inspiration sparked from meetings with school officials and the town's textile mill origins; the architect was challenged to meld heritage and current resources with curricular vision.

Today's two-story, 249,500-square-foot facility of brick, glass and metal welcomes 1,500 students in grades 9 through 12, with core capacity for tomorrow's 1,800.

Optimizing a stubborn environment, its trapezoid footprint cuts a north-south axis into 75 acres of sloping red clay and piney woods.

Expansive glass entrances with cantilevered canopies form a "gateway" corridor to host ongoing learning and public after-school functions. The architecture also harvests natural light through rhythmic placement of windows and clerestories—more than 16,000 square feet of glass. Along with increased daylight, 78 interactive whiteboards and a technology-based media center support student performance. A branching floor plan offers traditional organization and security of administrative areas, classrooms and common support spaces, including the gym, 900-seat auditorium and airy commons/cafeteria, as well as facility expansion opportunities.





T.C. Williams High School
Alexandria, Virginia







Working together, Alexandria City Schools, the architect and community leaders settled on a new vision for replacing T.C. Williams High School. The measures taken to make this vision a reality:

•**Community and ownership**. The school is configured to operate as four 575-student academies and one 200-student academy. The academy structure co-locates classrooms, student services, counselors, social workers, administrators and clerical assistance to support teachers and students in smaller learning environments. This structure helps students build relationships and makes it easier to facilitate project-based learning and collaboration among teachers.

•**Safety**. The school has more than 100 video cameras situated in critical areas of the school. Additionally, design considerations include wider hallways, decentralized administration offices and natural light.

•**Impact of sustainability**. Although the community fully supported the concept of creating a green school, the idea that the school could be used as a teaching tool was the sincere intention. The designer met with each curriculum specialist and planned out how to incorporate the building's green features into the curriculum. The U.S. Green Building Council awarded a point for curricula involvement in the building's sustainable rating systems. Features incorporated into the curriculum:

-A 450,000-gallon cistern that stores water to use in toilet flushing, irrigation and cooling tower operations (net water savings of more than 6 million gallons per year).

-A rain garden to increase water quality in downstream tributaries.

-A roof garden that provides stormwater management and education opportunities for science and horticulture curriculums.

-Specialized HVAC and lighting-system controls that reduce energy consumption by 20 percent more than 1999, ASHRAE 90.1.

-A central "dashboard" in the dining area, which provides students with access to the data collected by the measurement and verification system.

T.C. Williams High School has been registered with the USGBC and anticipates receiving silver or gold certification.



Moseley Architects, PC

Design team:
James Copeland, AIA, Managing Principal; William Riggs III, AIA, Project Manager; Anthony Bell III, AIA, Project Architect; Stephen Lyons, PE, Mechanical Engineer; Stephen Jones, PE, Paul Gagnon, PE, Structural Engineers; Bryna Dunn, AICP, Director of Environmental Planning and Research; Terricinia St. Clair, Interior Design; Michael Ferri, AIA, Construction Administration

Client:
Alexandria City Public Schools; Mark Burke, Director, Planning and Construction

Capacity:	Space/student:	Area:
2,500	184 sq. ft.	461,147 sq. ft.
Total cost:	**Cost/square foot:**	**Completion:**
$85,678,000	$186	August 2007

Photographer:
Hoachlander Davis Photography

Warhill High School
Williamsburg, Virginia



Moseley Architects, PC

Design team:
James McCalla, AIA, Managing Principal; Kenny Durrett, Project Manager; Susan Pryor, Project Architect; James Miller, Mechanical Engineer; Richard Nelson, Electrical Engineer; William Gaspar, PE, Construction Administration

Client:
Williamsburg-James City County Public Schools; Bob Becker, Assistant Superintendent for Operation

Capacity: 1,250	**Space/student:** 192.556 sq. ft.
Area: 240,695 sq. ft.	**Total cost:** $48,425,675
Cost/square foot: $201.19	**Completion:** August 2007

Photographer:
Hoachlander Davis Photography

The construction of Williamsburg-James City County's newest high school was supported by a $39.8 million bond referendum. Warhill High School serves 1,250 students and is designed with core spaces to accommodate 1,450 students. The vision for this project was created during intense design workshops with teachers, administrators, community members and students. The result is a spacious, well-lighted, functional, technology-advanced facility for this historic Virginia community.

Warhill High School was built from the ground up with technology integration in mind, and contains an extensive array of technology and software that accommodates different learning styles, differentiated instruction and research-based instructional strategies.

Public spaces in this two-story facility such as the auditorium, cafeteria and gymnasium are separated from the academic spaces. This school also accommodates two distinct magnet components focusing on pre-engineering, technology and pre-medical.

A two-story media center also is part of the design; science labs and classrooms surround the second level to create a science department. A second-floor bridge, with room for administrative office space, connects two classroom wings on the upstairs portion of the building. A courtyard is adjacent to the media center. Daylight is maximized throughout the building with clerestory windows.

All materials used in the construction are highly durable: a structured-steel frame, utility brick, architectural precast concrete, aluminum composite metal panels, aluminum storefront exterior windows, aluminum curtainwall entries and exposed steel trusses.









Chicagoland Jewish High School
Deerfield, Illinois



OWP/P

Design team:
Trung Le, Stuart Brodsky, Kerry Leonard, Justin Cafferty, David Bibbs, Dan Fagan, Keith Hammelman, Wendy Watts, Wes Del Prete, Geoff Walters

Client:
Chicagoland Jewish High School;
Ted Schaffner, Interim Head of School

Capacity:
250

Space/student:
288 sq. ft.

Area:
72,000 sq. ft.

Total cost:
$16.1 million

Cost/square foot:
$224

Completion:
September 2007





Rooted in the values of conservative Judaism, Chicagoland Jewish High School (CJHS) is a college-preparatory day school that offers a rigorous dual curriculum focusing on balancing the intellectual, moral and spiritual development of its students.

CJHS was started in 2004 using an existing synagogue's classrooms supplemented with modular classrooms. Anticipating a maximum enrollment of 400 students within the next decade, the CJHS leadership decided to take measures to accommodate its growing student population, which led to the decision to relocate the school. In 2008, CJHS graduated its first class of 30 seniors from the new building.

Reinforcing the importance of the spiritual development of its students, the sanctuary serves as the heart of the building. In addition to serving as a space for daily prayer, it was designed to support other activities while maintaining the integrity of its sacred nature. Complementing academic spaces, the entry and main corridor emphasize "spaces in between," serving as places for socialization, thoughts and prayers. The incorporation of materials such as wood and metal symbolize cultural and religious philosophy.





The Hun School, The Hun Athletic Center
Princeton, New Jersey



Saphire + Albarran Architecture LLC	
Design team: Joseph E. Saphire, AIA, Principal-in-Charge/Architecture; O'Donnell & Naccarato, Structural Engineer; Van Note Harvey, Civil Engineer	
Client: The Hun School of Princeton; James Byer, Headmaster	
Area: 39,100 sq. ft.	**Total cost:** $11 million
Cost/square foot: $281	**Completion:** September 2007
Photographer: Ross Stout/Taylor Photo	



The Hun School of Princeton is an academically and architecturally distinctive prep school in central New Jersey.

For the design of its new athletic center, the school wanted a building that would continue its tradition of excellence and fit in with its campus—an academic village of Gothic-style buildings set in a greensward with rolling hills.

The design of the building responds to three major considerations: site, program and a strong existing architectural context.

Situated on a steeply sloping site at the edge of campus, the athletic center is nestled into the hillside whereby three stories are created on one side and 1½ stories on the other side. In response to this dramatic change in elevation, the architect organized the building around a three-story entrance gallery and gave it two main entrances to address both the campus and the playing fields. The building is angled to be parallel with the playing fields.

Internally, the main program spaces are organized off the gallery. Two gyms, on each side of the gallery, allow the core facilities of locker rooms, team rooms and the fitness center to be situated in between.

The buildings are clad in masonry and stucco with steeply pitched roofs in response to the existing campus architecture.





Wekiva High School
Apopka, Florida









Designed to relieve crowding at Apopka High School, Wekiva High School was designed using the architect's high school prototype for Orange County Public Schools.

To ensure student safety, the 3,214-station school was designed with a single, controlled entrance at the administration area to provide secure and limited access to the campus for all visitors. The administration building also affords visual access to the entire courtyard, further bolstering the security of the school and students. To enable the community to use the facilities after hours, the gymnasium, media center, auditorium and cafeteria are situated at the front of the school for easy access.

The high school was designed with three, two-story academic clusters along the back of the campus and can be organized by grade level or curriculum depending on the school's needs.

All educational spaces within the school are equipped with overhead LCD projectors and state-of-the-art sound systems.

One of the biggest challenges was the site. Because of an expressway expansion at the south side of the property, the school's boundaries were altered after the design process started. The solution was to relocate the athletic fields and reconfigure the retention ponds to accommodate the smaller site. The project was delivered on time and under budget.

SchenkelShultz Architecture

Design team:
J. David Torbert, AIA, Principal-in-Charge; Daniel M. Tarczynski, AIA, Designer; Lynn M. Lefebvre, AIA, Project Architect/Project Manager; David Gray, Construction Administrator

Client:
Orange County Public Schools; Alex Busto, Director of Preconstruction

Capacity:	Space/student:	Area:
3,214	108 sq. ft.	348,488 sq. ft.
Total cost:	**Cost/square foot:**	**Completion:**
$57,652,275	$165.44	August 2007

Photographer:
Raymond Martinot/Martinot Photo

Tilton School, Tilton Academic Building
Tilton, New Hampshire



Scott Simons Architects
Design team: Scott Simons, Austin Smith, Harry Hepburn, Will Gatchell, Charles Young, Stephen Fraser
Client: Tilton School; James Clements, Head of School
Area: 38,000 sq. ft.
Total cost: $8.8 million
Cost/square foot: $231
Completion: August 2007
Photographer: Justin Van Soest, 2008

Tilton School's goal was to create an academic building that would transform the way the school thought about itself. Having spent seven years strengthening its curriculum, faculty and board of trustees, the school was eager to build a facility that represented in physical form the many positive changes that had occurred internally. A new multipurpose academic building organizes the school's program requirements to align with its academic mission.

The program includes three new science laboratories and prep rooms, a seminar room for 114, the Center for Learning, a language laboratory, eight new classrooms, faculty offices and new administrative offices.





The 38,000-square-foot building is designed to be harmonious with the adjacent Plimpton Hall. Windows and floors align; proportions and materials are respected. With that foundation, the new academic building also strives to be more innovative and modern. It is open and light, and new materials blend with traditional. For example, many of the interior corners are rendered in glass to encourage views from the corridors into the offices and lecture hall. The building is designed to be high-performance, with an exterior barrier insulation system, high-performance mechanical and lighting systems and controls, light shelves and sunshades along the southern elevation, and outstanding daylighting characteristics in all teaching spaces. It blends well with the other traditional brick buildings on campus, yet clearly is a building of its time.





The exterior was designed with strong references to the great academic and mill buildings of northern New England. It is built of rugged, ageless materials: brick, granite, white oak and glass. The new building is connected to Plimpton Hall, the administrative and academic building. The two buildings create a unified academic/administrative complex and spatially define the new Academic Quadrangle.

To emphasize the school's new academic model of horizontal integration, departmental classrooms and programs are close to their companion classrooms and programs. Faculty offices and meeting rooms were merged to encourage collaboration and cross-disciplinary teaching.

Andy Dekaney High School
Houston, Texas









SHW Group LLP

Design team: Mark Lam, AIA; William Wadley, AIA; Stuart Campbell, AIA; Frank Kelly, FAIA; Jody Henry, LEED AP	
Client: Spring Independent School District; Ralph H. Draper, Superintendent	
Capacity: 2,500	**Space/student:** 194.4 sq. ft.
Area: 486,000 sq. ft.	**Total cost:** $56,465,000
Cost/square foot: $116.18	**Completion:** May 2007
Photographer: Richard Payne	

Andy Dekaney High School is situated in a deeply wooded area of about 81 acres, with entrances and signage that create a park-like atmosphere. The facility was designed and built for a capacity of 2,500 students in grades 9 to 12.

The academic portion of the school is divided into four small learning communities of about 600 students each that are aligned vertically with grades 9 to 12. Each community has its own individual aesthetic and flexible area with passive supervision at the entrance and includes an administrative area, offices for the assistant principal and counselor, and a conference area.

The building includes a large-group instruction area, auditorium, coffee shop, band hall, choir hall, black-box theater, visual arts, career technology, a competition gymnasium and two practice gymnasiums, practice pool and other athletic spaces in addition to core areas such as the library and cafeteria.

Multiple display areas and visual connection into program areas enable the school to celebrate individual accomplishments.

The academic houses, administration, athletics, library, cafeteria, auditorium and large-group instruction area are connected to one another through the "Main Street" corridor. This main spine of the building consists of two-tier clerestory windows to bring in natural light. It also introduces views to the outside, while maintaining separation of noisy functions such as the cafeteria, band and athletics from quiet study and administrative areas.

Carl Wunsche Sr. High School
Spring, Texas



SHW Group LLP

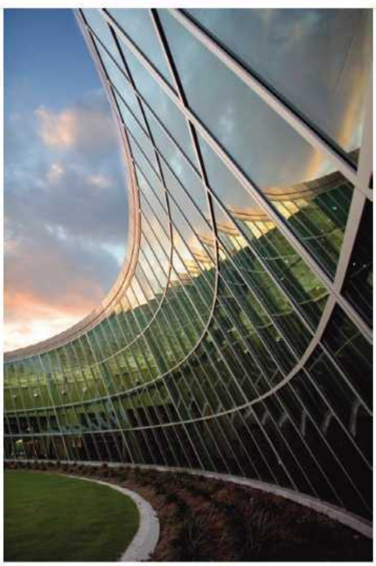
Design team: Gary Blanton, AIA; William Wadley, AIA; Stuart Campbell, AIA; Matthew Gvist; Frank Kelly, FAIA	
Client: Spring Independent School District; Ralph H. Draper, Superintendent	
Capacity: 1,500	**Space/student:** 182.12
Area: 273,178 sq. ft.	**Total cost:** $31,078,700
Cost/square foot: $113.77	**Completion:** December 2006
Photographer: Richard Payne	

Carl Wunsche Sr. High School, a career academy, engages and motivates students by integrating rigorous academic and career studies. It's a school of choice to which students from the district's three other comprehensive schools may apply, and it serves 1,500 students in grades 10 to 12. The district wanted to respect the character of the adjacent Old Town Spring area, while projecting a professional, business-oriented image at the same time.



Academically and spatially, the school is organized about three towers (the Professional Tower, the Technology Tower and the Medical Tower), each for about 500 students with integrated core academic and career spaces. The three towers are linked by an interior street that also connects the administration offices, library, large-group instruction space, cafeteria and shops run by the students as part of their instruction.





Two of the three towers are organized about highly flexible, two-story open spaces with modular furnishings on raised floors housing career programs. It is anticipated that these programs will change frequently to keep up with businesses in the world beyond the campus. The central spaces and all classrooms have extensive areas of glass so that everyone in the school can see the interesting work underway. The third tower incorporates much of the existing building on the site, including converting an old gymnasium into an auto-technology shop.



Emmett J. Conrad High School
Dallas, Texas





SHW Group LLP

Design team:	Terry Hoyle, AIA; Jonathan Aldis, AIA; Gary Hardaway, AIA; Patrick Kinser
Client:	Dallas Independent School District; Michael Hinojosa, Superintendent
Capacity:	2,000
Space/student:	165 sq. ft.
Area:	330,000 sq. ft.
Total cost:	$40,382,000
Cost/square foot:	$122.37
Completion:	July 2006
Photographers:	Mark Trew; John Benoist

Emmett J. Conrad High School is a three-story comprehensive high school serving 2,000 students in grades 9 to 12. The design is arranged as four academic houses serving core curriculum. Elective subjects are contained within academies. Students enjoy various amenities, as well as on-site training, provided by national-brand companies, including baking, restaurant management and health services. Computer labs accommodate the school's emphasis on technology-enriched career programs.

The school's athletic fields are situated on city park land. As part of a cooperative effort, the architect and school district worked with the Dallas Parks and Recreation Department and the Army Corps of Engineers to remedy flooding problems on that portion of the site.

Site development for the project included parking for 483 cars; landscaping; irrigation; a competition softball field and baseball field (with lighting); a competition football field with a four-lane synthetic track (with lighting); two football practice fields; a bus loop; a service court; and all public and private sidewalks. Extra parking, floodway modifications, mass grading and wetlands mitigation in the adjoining park also were included.



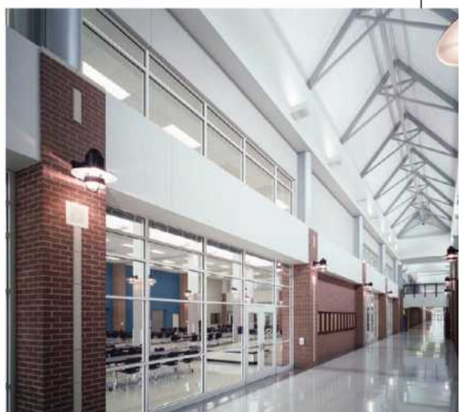


Justin Wakeland High School

Frisco, Texas









SHW Group LLP

Design team: Terry Hoyle, AIA; Jonathan Aldis, AIA; Trey Laird, AIA; Konrad Judd, AIA		
Client: Frisco Independent School District; Rick Reedy, Superintendent		
Capacity: 1,800	**Space/student:** 189 sq. ft.	**Area:** 340,000 sq. ft.
Total cost: $49,306,647	**Cost/square foot:** $145.02	**Completion:** July 2006
Photographer: Mark Trew		

Designed for 1,800 students in grades 9 to 12, Justin Wakeland High School is the third high school in the Frisco Independent School District, one of America's fastest-growing school systems.

The building and site organization required bold emphasis to distinguish the school from its weighty surroundings—a massive freeway and colossal retail box stores. Eco-friendly materials were used throughout to reflect the community's history, and contrasting colors and proportions of masonry outside are used to encourage scale. Vertical emphasis is conveyed via stone-clad tower elements around the building. Landscaping berms and proximity to the neighborhood diminish scale on residential sides.

A central commons runs east-west along the main site axis, connecting the building's formal entry with the bus loop behind the building and serving as the main circulation element for core functions: academics, administration, library and dining.

Students enjoy a variety of electives supported by amenities, such as a state-of-the-art performance hall with catwalks, control room and orchestra pit. Integrated technologies, including digital projectors in classrooms, a wide-area network and extensive security system, enhance instruction delivery throughout.

Vinton-Shellsburg High School
Vinton, Iowa







StruXture Architects

Design team:
John Darveau, AIA; Nicholas W. Hildebrandt, Associate AIA

Client:
Vinton-Shellsburg Community School District; Randy Braden, Superintendent

Capacity:
600

Space/student:
201 sq. ft.

Area:
121,000 sq. ft.

Total cost:
$13.8 million

Cost/square foot:
$114

Completion:
August 2007

Photographer:
Dale Photographics, Inc.

After referendums for a new elementary failed, the district's superintendent addressed the problem of aging facilities by shifting student populations and changing functions of the district's newer facilities, while building a new high school and closing two older elementary buildings. Now a source of pride to the entire district, the new 600-student high school provides comfortable, new teaching spaces to enhance the educational process.

The school is designed to allow public access to the facility's 1,200-seat, three-court gymnasium and 645-seat, fly-loft theater, while maintaining security and separation of the academic spaces. The design also incorporates security features to lock down the building during school hours; all access is through the office area. The school's office also has the ability to lock down the academic wing from the public areas in case of emergency.

New education spaces are equipped for future technology and include a fiber-optic backbone to each classroom that terminates in a teacher-controlled technology cabinet. This creates teaching tools of the room's computers by networking them into the room's overhead LCD projector.

Building for the future, the facility incorporates energy-saving features such as improved insulation values, geothermal mechanical systems, low-E glass, and advanced lighting and controls.



Gila Ridge High School
Yuma, Arizona









VCBO Architecture

Design team:
Boyd McAllister, AIA, Principal-in-Charge; Jeanne Jackson, AIA, LEED AP, Project Manager/Project Architect

Client:
Yuma Union High School District No. 70; Toni Badone, Superintendent

Capacity: 1,800	**Space/student:** 153 sq. ft.
Area: 275,000 sq. ft.	**Total cost:** $50,533,000
Cost/square foot: $184	**Completion:** August 2007

Photographers:
Ed Taube; VCBO

Gila Ridge High School provides an innovative and environmentally responsive design resulting from a lively collaboration of stakeholders. The district determined the need for the new building, interviewed architects, and then set up a group to begin defining the program for a student-centered facility.

The programming and design committee included administration, facilities/maintenance personnel, department heads and teachers from the existing four comprehensive high schools; parents; and most important, students. Small learning communities were requested from all stakeholders—even the science teachers were willing to separate labs to achieve this goal.

Sustainable measures incorporated into the design include the careful and conscious orientation of the building along the east-west axis (all classrooms have only south- or north-facing fenestration); the use of locally produced and low-VOC building materials; and the selection of a chilled-water mechanical system for cooling, rather than the package rooftop units commonly used in the area. Electrically, the building uses multi-level lighting options and occupancy sensors within individual spaces to accommodate different classroom activities, as well as save energy. Classroom daylighting was modeled, and sloped ceilings with high light reflectance were used to draw natural light deep into each classroom. The building envelope design, including the use of high-performance glazing and light-colored exterior materials, also contributes to this exceptionally conscientious facility.

Shakopee High School
Shakopee, Minnesota



Wold Architects and Engineers

Design team:
R. Scott McQueen, Paul Aplikowski, Job Gutierrez, Joel Dunning, Lynae Schoen, Matt Bickel, Ihor Panchenko, Kevin Marshall

Client:
Independent School District 720; Jon McBroom, Superintendent

Capacity:
1,600

Space/student:
200 sq. ft.

Area:
321,000 sq. ft.

Total cost:
$44,896,377

Cost/square foot:
$139.86

Completion:
April 2007

Photographer:
Aaron Holmberg/Holmberg Studios

With its existing high school running out of space, the rapidly growing Shakopee school district needed to create a new high school for 1,600 students in grades 9 to 12. The district challenged the architect to create a collaborative center for students, staff and the community. The facility also needed to provide flexibility to allow for a second high school elsewhere, or grow this facility to 2,400 students.

The three-story facility includes an 800-seat auditorium, four gym stations, science, art, music, a family and consumer science room, and industrial-technology labs. The flexible classroom clusters include generous natural light, are adjacent to lab spaces, and surround the three-story, daylighted student commons. The commons is the hub of the student day with easy access to instructional spaces, as well as the media center, guidance offices, administration, the lecture hall, school store and activities offices. After hours, the commons serves as a gathering space for events and community activities.

The new Shakopee High School is a dynamic combination of a community center and academic learning environment.





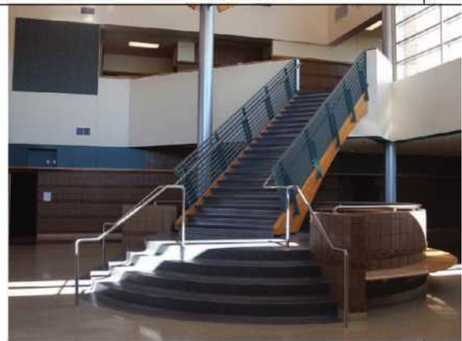






Sheyenne Ninth Grade Center
West Fargo, North Dakota









YHR Partners, Ltd.

Design team:
Mark D. Lundberg, AIA, LEED AP;
Julie N. Rokke, AIA, CID

Client:
West Fargo Public School District No. 6;
Dana Diesel Wallace, Superintendent

Capacity:
600

Space/student:
218 sq. ft.

Area:
130,972 sq. ft.

Total cost:
$14,581,898

Cost/square foot:
$111

Completion:
August 2007

Because West Fargo Schools had outgrown its existing high school building, and to help freshmen adjust to the high school environment, the school board and administrators decided to move 600 freshman students from the high school and place them in a separate building.

The site has separate bus and parent dropoff areas to ease congestion and increase student safety before and after school. The two separate entries, both visible from the administration area, are connected to a commons area that collects students into one easily monitored area. Visitor entry is controlled electronically; visitors must pass through the office to enter the building.

The academic pods are organized into four houses of five classrooms each, with common elective classrooms occupying the center of the building.

The building is designed in two parts: the public/community-use spaces and classroom media spaces, which can be separated by locked doors to allow the community to use the commons and gym area after hours. The building infrastructure is designed for expansion into a second high school.

POST-SECONDARY

CITATIONS

Cannon Design
California State University—Dominguez Hills, Loker Student Union
Carson, California .... p. 138

"Well-detailed inside and out. A very impactful renovation and addition."

—2008 Jury



Cannon Design
University of Maine, Student Recreation and Fitness Center
Orono, Maine .... p. 139

"Beautiful combination of materials inside and out. Clean details."

—2008 Jury



Visit SchoolDesigns.com.

POST-SECONDARY

CITATIONS

Carrier Johnson + CULTURE
Pitzer College, Residential Life
Claremont, California .... p. 140

"Environmentally sensitive; nice use of materials. Appropriate recognition of site and views. A holistic living/learning approach."

—2008 Jury



LPA Inc.
Cuyamaca Community College District, Student Center
El Cajon, California .... p. 141

"This center is the heart of campus, and has a sense of entry and engagement to the site. Thoughtful articulation of water and response to sunlight."

—2008 Jury



OUTSTANDING POST-SECONDARY

OUTSTANDING POST-SECONDARY

OUTSTANDING POST-SECONDARY

California State University—Dominquez Hills, Loker Student Union
Carson, California











"Well-detailed inside and out. A very impactful renovation and addition."

—2008 Jury

Cannon Design

Design team:
Mehrdad Yazdani, Design Principal; Craig A. Hamilton, AIA, LEED AP, Project Principal; Marion E. LaRue, LEED AP, Project Manager; Mark T. Piaia, AIA, LEED AP, Project Manager; Jack Poulin, IIDA, Interior Designer

Client:
California State University System; Mildred Garcia, President

Capacity: 12,500	**Space/student:** 10.96 sq. ft.
Area: 137,000 sq. ft.	**Total cost:** $34 million
Cost/square foot: $248	**Completion:** January 2007

Photographer:
Assassi Productions

To update and accommodate the expanding requirements of its student body, California State University—Dominguez Hills, planned a 65,700-square-foot renovation and 71,500-square-foot addition. A multilevel courtyard separates, yet connects the two buildings. It serves as a physical and symbolic campus core, promoting retail activity and facilitating interaction among students and faculty.

The $28 million student union contains student lounge areas to meet social space demands, a bookstore and retail stores, student-services and administrative offices, a full kitchen, and indoor and outdoor dining areas. Expanded food services include fast food, fine dining and a sports lounge. Other amenities include a large ballroom; computer, game, conference and meeting rooms; a campus post office; and banking services.

The addition provides a fresh, inviting atmosphere and incorporates numerous sustainable-design features, including natural lighting of more than 90 percent of interior spaces; insulated, low-E coated glass; and insulated skylight glass that reduces interior heat gain to reduce energy consumption. More than 50 percent of existing mechanical, electrical and plumbing infrastructures, including ducting, piping, conduit and cabling, panels and controls, were reused.

University of Maine, Student Recreation and Fitness Center
Orono, Maine



Cannon Design

Associated firm: Oest Associates, Inc.

Associated firms:
Brailsford & Dunlavey, Programming Consultant; Pizzagalli Construction Company, General Contractor; Counsilman/Hunsaker & Associates, Inc., Aquatics; Kalin Associates, Inc., Specifications Writer; ARUP, Code Consultant

Design team:
Peter M. Hourihan, Project Principal; Jeffrey Hoseth, AIA, Project Manager; David Body, FAIA, RIBA, Principal/Sports Planner; Colleen McKenna, Associate AIA, LEED AP, Sports Planner; David D. Ordorica, AIA, LEED AP, Senior Technical Architect; Gerald Weslar, RA, Project Architect; Alisa Churchill, Project Designer; Brian Pineau, Electrical Engineer; John M. Swift Jr., PE, LEED AP, CEM, Mechanical Engineer; Fletcher J. Clarcq, CEM, LEED AP, Mechanical Engineer; Ronald Furbish, CPD, Plumbing/Fire Protection; Joseph L. Cohen, AIA, CPA, LEED AP, Cost Estimator; Adam J. Redbord, Associate AIA, LEED Coordinator; Sameh Ghabour, Architectural Team; Dimitrios S. Contoyannis, PE, CEM, LEED, Mechanical Engineer

Client:
University of Maine; Kenda Scheele, Senior Associate Dean of Students

Area: 88,000 sq. ft.	**Total cost:** $17.1 million
Cost/square foot: $192	**Completion:** August 2007

Photographer:
Anton Grassl/Esto





"Beautiful combination of materials inside and out. Clean details."

—2008 Jury



Directly aligned with its mission to create an attractive campus with programs that enhance the learning environment, the University of Maine's 88,000-square-foot Student Recreation and Fitness Center is its largest building project to date. The center serves as a social gathering place for students, faculty and the community. Connection to campus, the outdoors and to one another is a primary theme throughout. Amenities include a three-court gymnasium, multipurpose activity court, racquetball/squash courts, fitness center, natatorium, walking/jogging track and support spaces.

The extensive use of glass provides panoramic views to more than 90 percent of the spaces on campus. An exterior materials palette of architectural precast concrete, copper metal-clad panels, field stone, locally harvested "South Bay Quartzite" stone veneer and glass walls harmonize with the natural setting of New England. Exposed wood structure and paneling evoke a natural, organic ambience. Two double-height, skylighted galleries lined with glue-laminated timber columns form the primary circulation and are intersected with a main stair and elevator that provide access to a second level. A centrally situated control desk with a nearby "free zone" offers views to multiple activity areas.

Innovative construction materials and methods used contained virtually no volatile organic compounds. Sustainable-design components and systems including recycled materials, "Green Guide"-certified furniture and energy-saving heat-recovery systems earned this facility LEED silver certification.

Pitzer College, Residential Life
Claremont, California





Carrier Johnson + CULTURE

Design team:
John Beck, Paul Kearney, Jennifer Bartelt, Charlene Reed, Jeff Causey

Client:
Pitzer College; Jim Marchant, Dean of Students

Capacity:
94 units; 323 beds

Area:
103,235 sq. ft. (4 buildings)

Total cost:
$23,092,190

Cost/square foot:
$223.68

Completion:
December 2007

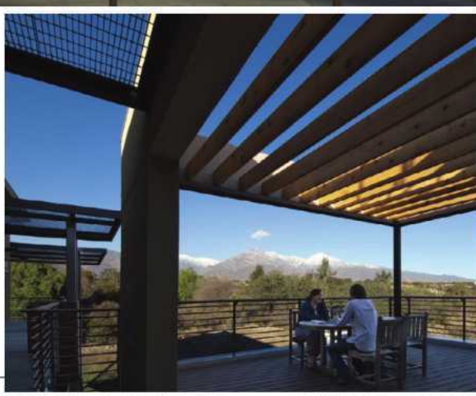
Photographer:
Paul Hester/Hester + Hardaway Photographers

Pitzer College embraced the design of the Residential Life project because of its attention to the needs of the campus, students and, most notably, the Earth.

The goal of the four-building housing project was to reinvent the collegiate lifestyle. The design team responded with a self-contained community that blends living accommodations (single- and double-room suites) with learning opportunities (classrooms and art studios). And with amenities such as thematic gardens, cozy meeting nooks, study rooms with expansive windows, faculty suites with exterior patios for informal classes, and community living rooms, students are more apt to stay on campus all four years.

Planning the new halls around an experiential courtyard combines the pursuit of ecological goals with the way students live, and its focus on the environment has earned the project a LEED gold rating. The contemporary architecture and interior design speak to— and help support— many sustainable-design techniques, including solar photovoltaic cells, a central plant with energy-efficient heating and cooling, Dutch doors, native plantings, a rainwater recycling system, overhangs and sun shades.

"Environmentally sensitive; nice use of materials. Appropriate recognition of site and views. A holistic living/learning approach." —2008 Jury





Cuyamaca Community College, Student Center
El Cajon, California









"This center is the heart of campus, and has a sense of entry and engagement to the site. Thoughtful articulation of water and response to sunlight."

—2008 Jury

LPA Inc.	
Design team: Glenn Carels, Chris Torrey, Jim Raver	
Client: Grossmont Cuyamaca Community College District; Dale Switzer, Director of Facilities and Planning	
Capacity: 15,000	**Area:** 47,200 sq. ft.
Total cost: $16 million	**Cost/square foot:** $340
Completion: August 2007	
Photographer: Chris Costa	

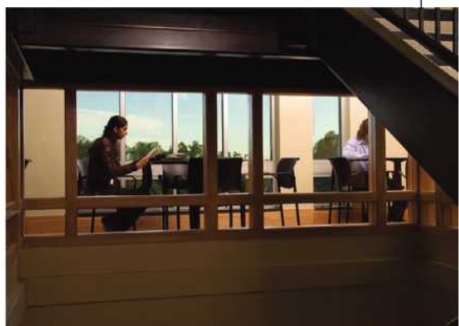
The new 47,200-square-foot Student Center will create a centralized destination on campus for informal student activity. The program spaces include a food court, dining facilities, meeting rooms, a bookstore, health services, a student lounge, and club rooms for student government and student affairs. The sloping building site is situated centrally on campus within an existing forested open space.

The Student Center fronts a student plaza and connects this active outdoor space with the passive setting of the forested building site. Extending the student plaza through the Student Center reinforces an existing site connection between science and nature. Building forms and surfaces reflect spiral and fractal patterns found in both science and nature. Because of the slope of the site, the extended plaza level creates an elevated viewing deck, providing outdoor spaces directly among the treetops. Vertical and horizontal transparent planes allow trees and passing clouds to complete this interior space visually.

In the evening hours, the building becomes a beacon of light at the heart of the campus.

Central Piedmont Community College—Cato Campus, Phase II
Charlotte, North Carolina








ADW Architects, pa

Associated firm:
Neighboring Concepts

Design team:
Jim Powell, AIA; Thomas Carlson-Reddig, AIA; Luis Tochiki, AIA; Jonathan Koricke, RA

Client:
Central Piedmont Community College; Wanda Towler, Director of Facilities

Area:
49,144 sq. ft.

Total cost:
$7,766,677

Cost/square foot:
$158.04

Completion:
November 2006

Photographer:
Sean Busher

This project for Central Piedmont Community College's Cato Campus included renovations to the existing two-story building, a 50,000-square-foot classroom addition, and an expansion to the existing horticulture building.

The addition complements the architecture of the main building through materials and form, creating a seamless integration. It also capitalizes on the topography, creating a lower-level entry from a new parking area to the north.

A glass- and wood-encased three-story stair anchors the internal organization of the building, bringing students to the center. The central core is highlighted by a circular, two-story volume and recalls the central dome-covered space in the original building.

In an attempt to further promote a sense of community, the design includes a variety of places that provide opportunities for informal social interaction. Soft seating, tables and window seats are dispersed on all floors of the building.

The building is steel frame with brick and cast-stone veneer. The heating and cooling is served primarily by the original building mechanical room and equipment.

North Carolina State University, Jordan Hall Laboratory Addition

Raleigh, North Carolina



BBH Design, PA

Design team:
Douglas Hall, Partner-in-Charge; Chris Nesbit, Project Manager; David Johnson, Takeshi Aratake, Dan Abraham, Elizabeth Kolepp-Mayer, Project Designers; Jason Kolano, Construction Administration

Client:
North Carolina State University; Lisa Maune, Assistant Director, Facilities

Capacity:
875

Space/student:
51.43 sq. ft.

Area:
54,000 sq. ft.

Total cost:
$13,170,579

Cost/square foot:
$243.90

Completion:
July 2007

Photographer:
James West/JWestProductions.com









This laboratory, office and classroom addition provides growth space for the College of Natural Resources and the Department of Marine, Earth and Atmospheric Sciences. The final building was master-planned for a research precinct, so the Jordan Hall addition addresses several campus planning concerns, including the existing patterns of pedestrian and vehicle circulation, and the impact on the environment. The addition not only is a "gateway" project, but also projects the university's image to its Centennial Campus. The building was identified as a pilot project for sustainable design and was crafted to meet regional high-performance guidelines.

During the concept-discovery stages, the faculty representatives indicated that the most difficult concept for students and others to grasp is the dynamic and cyclical occurrence of natural events. An existing garden immediately west of Jordan Hall and Biltmore Hall attempted to demonstrate this process of forest succession. This notion presented the designers with a rich opportunity to create an analogue between species succession, resulting in a forest and a series of successive learning experiences culminating in education. The concept of "succession" was explored both formally, as a scaled timeline that then was mapped onto the site, and conceptually, as a way of describing relationships among outdoor spaces.

Heartland Community College, Workforce Development Center
Normal, Illinois



BLDD Architects, Inc.
Design team: Randall L. West, AIA, Principal/Project Director; Bruce L. Maxey, AIA, LEED AP, Principal/Project Architect; Carson Durham, AIA, Senior Associate, Designer; Todd Cyrulik, AIA, Associate, Interiors
Client: Heartland Community College; Robert Widmer, Vice President of Business
Area: 101,000 sq. ft.
Total cost: $15,935,150.72
Cost/square foot: $157.77
Completion: August 2007
Photographer: Emery Photography



The Heartland Community College Workforce Development Center has earned the distinction as the state of Illinois' Pilot Project for Sustainable Design.

The center is an additional building on the Heartland Community College permanent campus, originally designed by the architect. It is a comprehensive economic-development resource dedicated to providing direct assistance to area business and industry; and providing a broad range of degree-granting educational programs, applied training and technical assistance designed specifically to serve the business and industrial community.

At the onset of this project, Heartland Community College recognized the merits of sustainable design, and the educational and financial opportunities related to pursuing sustainable design for the center. As a result, the design team employed many sustainable-design concepts: geothermal energy, sustainable materials, indoor air quality control, stormwater treatment and full building-systems commissioning. The resulting design is a building of architectural style that blends with the scale and detail of the existing campus.

The Workforce Development Center consists of three floors organized around a central atrium space allowing for student study, as well as an exhibit space highlighting student work, community businesses and industries. The program spaces are balanced on all floors to create critical adjacencies. Technology, a major focus of the center, is highlighted. An easily accessible, exposed cable-tray system also allows for maximum flexibility in technology changes.







Santa Rosa Junior College, Bailey Parking Facility and Clock Tower · *Santa Rosa, California*











BSA Architects – Bull Stockwell Allen

Associated firm: Walker Parking Consultants

Design team:
BSA: Robert E. Allen, FAIA, Principal; Bruce Jackson, Project Manager; Art Andersen, AIA, Construction Administration; Walker: Sanjay Pandya, Principal/Project Manager; Jorge Romero-Lozano, Assistant Project Manager; Richard Klatt, Traffic Study; Ken Napior, Sohban Khan, Structural Engineers; Barbara Manning, Lead Project Technician; Smith & Smith, Landscape Architect

Client:
Sonoma County Community College District; Curt Goringa, Vice President of Administrative Services

Capacity:
1,100 parking spaces

Area:
378,000 sq. ft.

Total cost:
$40 million

Cost/square foot:
$105.82

Completion:
September 2007

Photographer:
Rien Van Rijthoven Photography

The Santa Rosa Junior College campus is 85 years old and made up almost entirely of brick buildings. The college's students are mainly commuters (35,000+ annually), and the school suffered from a lack of parking on campus. The new parking garage is in a prominent location on the main access road to the campus and adjacent to original 1918 heritage brick buildings. It includes a grand stair and clock tower, and houses 1,100 parking spaces, a gain of 700 spaces.

The new parking facility was designed to:

•Accommodate the growing commuter student population's parking needs without taking up a large footprint.

•Redefine the major pedestrian route to the center of campus with a clock tower, and new landscape and hardscape development.

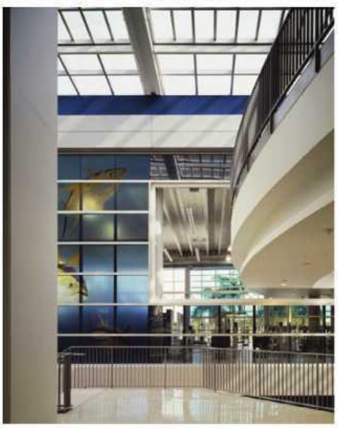
•Blend beautifully with and honor the college's existing heritage brick facilities and neighboring brick high school buildings.

•Create a new strong collegiate presence on the major street that runs past the college campus, but does not look like a parking facility.

Nova Southeastern University, University Center
Fort Lauderdale, Florida









Nova Southeastern's University Center is a 344,600-square-foot "fusion" facility that combines student, faculty and public activity, serves to expand the university's undergraduate programs and population, and provides athletic facilities to accommodate its Division II programs. Project components include a student union, recreation center, intercollegiate athletics, an arena, casual dining, and performing and visual arts.

The center ties the academic and residential quadrants together, fostering a sense of community. Architectural design draws on the existing campus character while expressing the active nature of the facility.

Project challenges involved incorporating multiple programmatic functions into one cohesive facility to meet user needs, which are expressed in the building's mass with high activity spaces visible day and night. Displaying the world's largest aquatic mural, a three-story, skylighted galleria space is the most prominent architectural feature and the facility's primary organizing element. Three levels of dedicated facilities include fitness, racquetball, a gymnasium, climbing wall, multipurpose rooms and lockers.

The multipurpose arena has 5,400 seats to accommodate athletic events, concerts and commencements. A performing-arts wing includes a black-box theater, dance theater and academic facilities. Activity spaces along the galleria/spine include food service, offices and a "flight deck" lounge.

Cannon Design

Design team:
David Body, FAIA, RIBA, Principal; W. Kenneth Wiseman, AIA, MRAIC, President, Professional Services, Design Principal; Roland G. Lemke, AIA, Principal; H. Grant Rogers Jr., AIA, CSI, LEED AP, Senior Associate, Project Architect/PM; Patricia A. Bou, AIA, Vice President, PM/Project Architect; Teeraporn Games, Senior Associate, Architect III; Peter G. Mendola, Architect II; Ronald Smith, Senior Associate, Architect; Moss/Miller Joint Venture, LLC, General Contractor; EDSA, Master Planning/Landscape Architecture; B&A Consulting Engineers, MEP Engineer; DeRose Design Consultants, Inc., Civil/Structural Engineer; Dunkelberger Engineering & Testing, Inc., Subsurface/Foundation Studies; CDAI Integrated Technical Solutions, Performance Lighting, Theater Consulting, Audiovisual/Acoustical Engineering; Atelier Ten, Lighting Design; Food Strategy, Inc., Food-Service Consultant; Gallagher & Associates, Graphic Design; Kroll Schiff and Associates, Security

Client:
Nova Southeastern University; John Santulli II, Vice President, Facilities Management

Capacity:
5,400 seats (expandable)

Area:	Total cost:
344,600 sq. ft.	$64 million

Cost/square foot:
$200

Completion:
September 2006

Photographer:
Jon Miller/Hedrich-Blessing

The University of North Carolina at Chapel Hill, Ram Village Residence Hall Complex · *Chapel Hill, North Carolina*









Clark Nexsen Architecture & Engineering

Associated firms: Sasaki Associates, Inc.; Coulter/Jewell/Thames, PA

Design team:
Peter J. Aranyi, AIA, Principal-in-Charge; Patrick Rose, PE, Electrical Engineer; Derick J. Ritter, LEED AP, Mechanical Engineer; Jason H. Jones, AIA, Project Architect; Jeff Fisher, PE, Structural Engineer; Angela Ritter, AIA, Interiors

Client:
The University of North Carolina at Chapel Hill; Larry M. Hicks, Director, Housing and Residential Education

Capacity:	Space/student:	Area:
919 beds	471.7 sq. ft.	433,566 sq. ft.
Total cost:	**Cost/square foot:**	**Completion:**
$70,153,000	$162	August 2006

Photographers:
John Wadsworth Photography; Clark Nexsen



Ram Village Residence Hall Complex provides 919 beds to juniors and seniors at The University of North Carolina at Chapel Hill.

Built on two separate sites on the university's south campus, these five buildings provide upperclassmen with apartment-style living spaces. The apartments are a combination of two-, four- and six-bed units with full kitchens and dining/living rooms. Public spaces include meeting and seminar rooms, recreational space, laundry rooms and mailrooms.

A major determinant in the design of the complex was circulation to the main campus; in order to make this a safe space for students to travel to and from, the design gave careful consideration to sitework such as grading, landscaping and site lighting. Card-only accessibility, emergency call boxes and pedestrian-scale lighting also were included.

Barnes-Jewish College, Goldfarb School of Nursing
St. Louis, Missouri



Christner Inc., Architect of Record and Landscape Architect

Associated firm: Ayers | Saint | Gross, Associate Architect

Design team:
S.M. Wilson Company, Construction Manager; Heideman | Associates, Inc., MEPF Engineer; Siebold, Sydow & Elfanbaum Inc., Structural Engineer; Frontenac Engineering Group, Inc., Civil Engineer; Geotechnology, Inc., Geotechnical Engineer; William Tao & Associates, Inc., Lighting Designer; Code Consultants, Inc., Code Consultant; Spellman Brady & Company, Furnishings/Artwork Designer; Heitmann & Associates, Inc., Building Enclosure Consultant; Engineering Dynamics International, Acoustical Consultant; Kenneth J. Lemp, Elevator Consultant; Rock Hill Mechanical Corporation, Mechanical Design/Build Subcontractor; Murphy Company, Plumbing Design/Build Subcontractor; Aschinger Electric, Electrical Design-Build Subcontractor; Ahern Fire Protection, Fire Protection Design-Build Subcontractor

Client:
BJC HealthCare; Michael Evans, Dean and Professor

Capacity: 790	**Space/student:** 133 sq. ft.
Area: 105,000 sq. ft.	**Total cost:** $27 million
Cost/square foot: $257.14	**Completion:** September 2007

Photographers:
Alise O'Brien; John Langholz/Christner Inc.



Replacing the outdated School of Nursing was imperative to achieve the school's strategic goals: advance the college's national ranking to a top 10 nursing school; attract top-tier faculty (both research and teaching); shift the focus toward full-time students seeking BSN and MSN degrees; and enhance capabilities to offer training that meets the highest clinical practice standards.

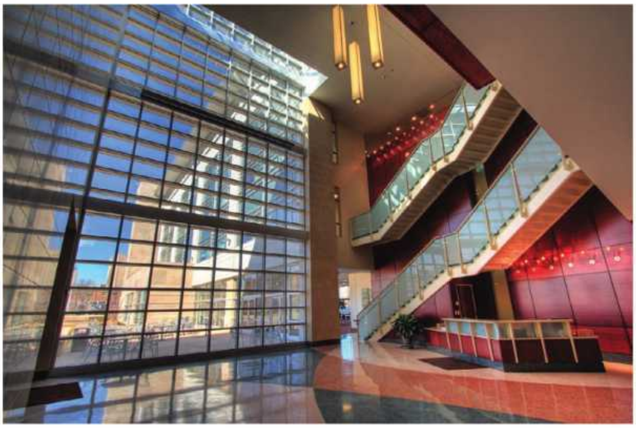
To understand how a new building could best support these strategic goals, the architects worked with the college to clarify programmatic and facility goals about numbers of faculty, staff and students, curriculum design, parking needs, and connections to the hospital and surrounding medical center. A comparative program study of top national nursing schools helped the planning team develop valuable benchmarks for this project in terms of space needs and utilization. Interactive workshops with users further explored organization and adjacencies.

Providing a prominent image for the School of Nursing within the large, urban medical center campus of Barnes-Jewish Hospital proved to be a challenge. The solution was a five-story building with bold forms and a landscaped entry plaza that creates a strong identity and sets the building off from its urban surroundings. The enclosed courtyard invites people in and accommodates a number of student-oriented activities with an outdoor cafe, event lawn, secluded seating and sculpture court. Signage faces three major streets.

The School of Nursing creates a wonderfully collaborative environment for students and faculty with classrooms, offices and research labs all housed in one building. The layout further facilitates interaction. The first-floor commons and lounge flows into the atrium and adjoins the outdoor plaza. A monumental stair connects the three academic floors, with skills labs and classrooms linked by wide corridors overlooking the atrium. Small study rooms, huddle spaces and student lockers are dispersed throughout the building to encourage informal learning.

Clinical simulation labs are central to the teaching environment and give students hands-on experience in a realistic medical environment. The clinical simulation labs include: physical assessment; critical care/ICU; two medical/surgical labs; maternal/child; and anesthesia/OR. Each lab uses computerized mannequins to set up complex teaching and learning simulations. A central video-control room provides live feed to seminar rooms.









"Our cutting-edge new facilities position us to fulfill our goals of transforming nursing education and transitioning to a top 10 nursing school."

—Michael L. Evans, Dean and Professor, Goldfarb School of Nursing





Doane College, Chab Weyers Education and Hixson Lied Art Building
Crete, Nebraska



The Clark Enersen Partners	
Design team: Lowel Berg, AIA, Principal-in-Charge; Rob Olson, AIA, Project Manager; Jennifer Klein, PE, Electrical Engineer; Adam Kent, Mechanical Engineer; Lisa Guerra, Interiors; Dennis Sheer, ASLA, Landscape Architecture; Eric Pavey, Construction Administrator	
Client: Doane College; Julie Schmidt, Vice President for Finance and Administration	
Area: 52,000 sq. ft.	
Total cost: $9.5 million	**Cost/square foot:** $183
Completion: August 2007	
Photographers: Schrader Marcus Photographics; Paul Brokering Inc.	



Doane College is a private liberal-arts college in Crete, Neb. The scenic 300-acre arboretum campus features a lake, winding paths and historic buildings.

The Chab Weyers Education and Hixson Lied Art Building is the newest addition to the campus. It serves as the home to the college's nationally recognized education and art programs. A visitor center and admission office also are in the building. The primary challenges were to design a contemporary classroom building while respecting the historical integrity of the campus, and to provide an architectural interpretation of the curriculum offered within. Choices for the masonry palette were driven by adjacent historic buildings.

The main entrance facade features an arched portico, a classic historical detail repeated throughout campus. The main entrance facade from the art department's previous home was removed, restored and integrated into the new building. The masonry patterns and textures are architectural expressions of the art curriculum. Inside the building, walls, ceiling, flooring and furniture were designed to mimic sculpture. A glass-enclosed student lounge helps to foster interaction, which is essential to the collegiate experience. It also serves as a "display case" for artwork and activity inside the building. A blown-glass chandelier represents the building's status as the creative and intellectual heart of campus. A variety of environments were created to accommodate formal and informal instruction, multimedia presentations, and group and individual study.

VOC-free paints, linoleum flooring made from easily renewable natural materials, modular carpet derived from corn, and bamboo wall and floor coverings are just some of the environmentally friendly materials used in the building.

Collectively, the new building is designed to inspire teaching and learning in a collaborative environment.







"The Chab Weyers Education and Hixson Lied Art Building acts as a gateway into the college and houses its Welcome Center. When visitors and guests see the intricate masonry and historical entrance, it provides a fitting preview of the beauty the visitor is about to experience on our campus."

—Julie Schmidt, Vice President for Finance and Administration







Lourdes College, McAlear Hall and Delp Hall
Sylvania, Ohio



The Collaborative Inc.

Design team:	Paul Hollenbeck, AIA, Partner-in-Charge; Michael Muse, AIA, Project Manager; Matt Clarkson, Associate AIA; Anne Yager, ASLA, LEED AP, Landscape Architect; Dion Harris, Associate ASLA, Landscape Designer; Bill Fick, Architectural Details; Dorey Schmidt, IIDA, Interior Designer; Dave Serra, Construction Documents; Bob Densic, AIA, Construction Administrator; Craig Bartley, CSI, LEED AP, Specifications Writer
Client:	Lourdes College; Mike Killian, Vice President of Finance
Area:	38,000 sq. ft.
Total cost:	$6,764,000
Cost/square foot:	$178
Completion:	September 2007
Photographers:	Justin Maconochie; Lourdes College

Now in its 50th year, Lourdes College recently has enjoyed exponential growth, creating a need for increased classroom space. As the first new building in more than 40 years, McAlear and Delp halls required careful study, as the building's design would set the tone for future campus expansions.

The new building includes a welcome center for the campus; eight classrooms; faculty offices; a resource center; and the WIN Center, a tutoring and educational-outreach program.

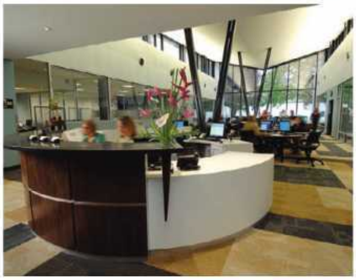
The classroom portion of the new building (McAlear Hall) maintains the college's Spanish Mission style and becomes a focal point at the campus entrance. To root the design in this time, the WIN Center (Delp Hall) is a more contemporary architectural expression.

Embodying the college's tradition of St. Francis, the patron saint of ecology, the roof system channels rainwater to an overflowing fountain bowl to recharge the groundwater system. Other notable sustainable-design initiatives include a geothermal HVAC system; daylighting strategies; views for 100 percent of building spaces; and integration of recycled and recyclable materials.









College of Southern Nevada, Library/Classroom Building
Las Vegas, Nevada









DCC Architects

Associated firm: Clark and Sullivan Construction (CMAR), General Contractor

Design team: Domingo Cambeiro, AIA, Principal; Mark Dowell, Director of Design; Matthew Toepper, Project Manager; Chris De Jesus, Designer	
Client: College of Southern Nevada/State of Nevada Public Works Board; Bob Gilbert, Director of Facilities (previous); Sherri Payne, Director of Facilities (current)	
Capacity: 1,717	**Space/student:** 45.5 sq. ft.
Area: 78,110 sq. ft.	**Total cost:** $20,407,346
Cost/square foot: $262.51	**Completion:** June 2008

The CSN Library/Classroom Building is a showcase educational facility on the West Charleston Campus of the College of Southern Nevada system. The LEED-sensitive design of 78,110 square feet features 24,000 square feet of library space, which includes an information commons for book and periodical searches, circulation and reference desks with work support rooms, document areas for special requests and micrographics viewing, student study rooms, library administrative offices and general seating areas. These spaces are dispersed within a 13,000-square-foot, two-story periodical and general stacks area, with a north-facing, full-height glass curtainwall system.

Other spaces in the building include a coffee shop with interior and exterior seating; a 120-seat lecture room; two classrooms dedicated for computer applications instruction; 25 general classrooms with full audio, video and data connectivity; and office space for the dean's administrative staff.

The exterior highlights finishes consisting of EIFS and sandstone veneers following suit with the standard color palette for the West Charleston Campus.







Grace College and Theological Seminary, Orthopaedic Capital Center

Winona Lake, Indiana





Design Collaborative, Inc.

Design team:
Kevin J. Scully, NCARB; Craig S. Scully, PE, Mechanical; Eric W. Sank, PE, Electrical; Engineering Resources, Structural; Foresight Consulting, Civil; Concept Consulting Group, Interiors

Client:
Grace College and Theological Seminary; Thomas Dunn III, Chief Operating Officer

Capacity:
1,800 (athletics);
2,600 (concerts/trade shows)

Area:
63,287 sq. ft.

Total cost:
$9,440,000

Cost/square foot:
$149.16

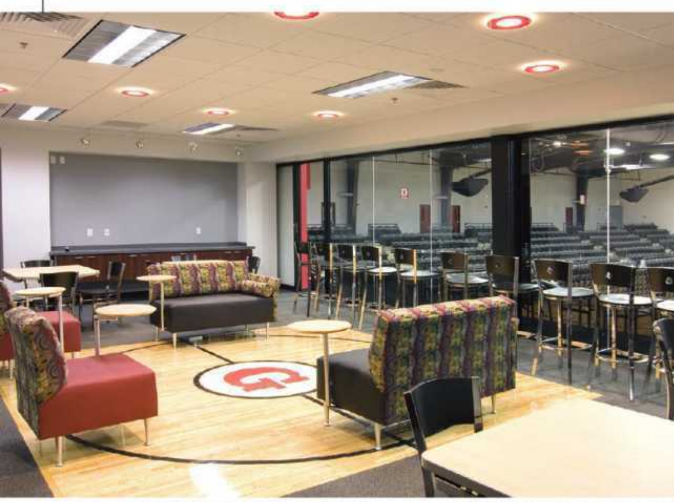
Completion:
May 2007

Photographer:
Tim Brumbeloe

Grace College and Theological Seminary is a steadily growing private higher-education institution in Winona Lake, Ind. In response to recent growth, it needed a multipurpose facility so that its students could gather for chapel services, basketball and volleyball games. The Winona Lake/Warsaw business community, known for its focus on orthopaedics, needed a place to hold conferences, trade shows and business meetings.

Grace College and Theological Seminary teamed with several community orthopaedic companies to fund and plan this unique facility. First, the design team remediated the site, which had been a dump for hazardous materials. The $9.4 million Orthopaedic Capital Center (OCC) was designed cost-effectively with a metal building core, accented by brick detailing and curved walls. The OCC features the latest in sports flooring, event seating, a movable stage and energy-efficient arena lighting.

The Grace OCC has enriched the Warsaw-area community. This athletic arena/event center provides 1,800 seats for athletic events; 2,600 seats for concerts and trade show events; and 650 seats for banquet events. The OCC also features three large meeting rooms and is home to the college's athletic department.





Christopher Newport University, David Student Union
Newport News, Virginia



DMJM Design | AECOM

Design team:
Robert Perry, AIA; Thomas Donaghy, AIA; Paul Sabatiuk, PE, LEED AP; Kiyou Hooshiar, PE; Frank Murphy, PE

Client:
Christopher Newport University; William L. Brauer, Executive Vice President

Capacity:
3,182

Area:
120,000 sq. ft.

Total cost:
$25,995,895

Cost/square foot:
$278

Completion:
August 2006

Photographer:
Hoachlander Davis Photography

David Student Union, a 120,000-square foot facility, is a key element in the fulfillment of Christopher Newport University's master plan. To help fulfill the university president's desire for a symmetrical tidewater aesthetic and a modern, asymmetrical student center program, the new student union is conceptualized as two separate buildings connected by an interior "street." A three-story atrium continues a campus walkway that ends at the campus Great Lawn.

The bookstore occupies one side of the street on the first floor, and a food court with the atmosphere of cafe dining occupies the other. A grand stair, a focal place for the student union, leads to the reception area for the 7,500-square foot, double-height ballroom and 3,600 square feet of meeting rooms on the second floor. The second floor has bridges across the street with student study spaces, e-mail kiosks and personal mailboxes. The third floor provides meeting rooms and offices for student clubs and organizations. Barrel-vaulted skylights flood the street and adjoining interior spaces with natural light.











Embry-Riddle Aeronautical University, Chris & Stephen Udvar-Hazy Library and Learning Center · *Prescott, Arizona*



DLR Group

Design team:
Rich Pawelko, AIA, Principal-in-Charge; Gary Worthy, AIA, Lead Designer; Stan Axthelm, RA, Project Manager; David Anderson, PE, Mechanical Engineer; Tom Kramer, PE, Structural Engineer

Client:
Embry-Riddle Aeronautical University; Christine Repp, Manager, University Construction and Planning

Capacity:
1,650

Space/student:
20 sq. ft.

Area:
32,572 sq. ft.

Total cost:
$7,661,402

Cost/square foot:
$235.21

Completion:
April 2008

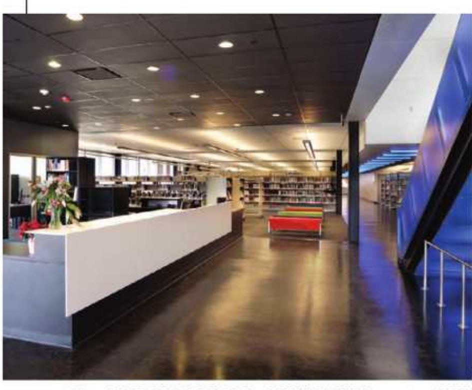
Photographers:
Neil Kopples; Mark Boisclair

With about 1,650 students, Embry-Riddle Aeronautical University is the only accredited aviation university in the world. This new 32,500-square-foot Library and Learning Center is the first project in the university's updated master plan.

The design concept for the Udvar-Hazy library uses flight as a metaphor. The building is composed of metal and glass, and seems to hover above the ground. The building's main entry is defined by an internally illuminated staircase that evokes the technological underpinnings of aeronautical education. The ascending staircase evokes flight, lifting students from the classrooms on the first floor to the resource center and commons on the second floor. The second level cantilevers in two directions; coupled with extensive glass, the space encourages informal learning surrounded by limitless views of the horizon.











Green River Community College, Marv Nelson Science Learning Center · *Auburn, Washington*






DLR Group, Design Architect

Associated firm: S.M. Stemper Architects, Architect of Record

Design team: DLR: Craig Mason; Andrea Bilbrey, Interiors; S.M. Stemper: Wayne Johnson	
Client: Green River Community College; Tom Weisweaver, Director of Facilities	
Capacity: 850	**Space/student:** 87 sq. ft.
Area: 74,000 sq. ft.	**Total cost:** $21 million
Cost/square foot: $283.78	**Completion:** February 2007
Photographer: Steve Keating	

The Marv Nelson Science Learning Center meets increasing demand for science and health sciences programs with a design that celebrates education and sustainability. The challenge was to design science labs, which commonly are energy-intensive, that could operate sustainably. The solution combines simple building organization with innovative systems, featuring the labs as the sustainable heart of the building.

A three-story building minimizes the footprint and preserves woodlands. Classroom wings bookend the labs, which are stacked in ascending order of complexity—an elegant arrangement that enables the labs to share utilities.

The building engages visitors with science as they walk through the door. Design elements convey principles of physics, geology, meteorology and botany, and an energy-monitoring system analyzes and displays the building's resource consumption on green touchscreen kiosks.

The Learning Center immerses students and staff in an arboreal campus experience. Extensive glazing and thoughtful building orientation imbue the center with daylight and connection to the surrounding forest. The result is a rich learning experience that links academic concepts to their physical manifestations just outside the window.

University of California—Irvine, Biological Sciences 3
Irvine, California



Esherick Homsey Dodge & Davis (EHDD)

Associated firm:
DES Architects Engineers

Design team:
Craig L. Ivancovich, DES; KPFF, Structural Engineer; M.A. Engineers, Inc., Mechanical; Rashmi Mehta, Hathaway Dinwiddie, Contractor; Konsortium I, Electrical; Penco Engineering, Inc., Civil; VSA n Associates, Acoustical

Client:
University of California—Irvine; Rebekah Gladson, Associate Vice Chancellor, Campus Architect

Area:
145,017 sq. ft.

Total cost:
$56,508,137

Cost/square foot:
$389.67

Completion:
February 2008

Photographer:
Nick Merrick



Biological Sciences 3 (BioSci 3) was designed to fill the rapidly growing need for research space for the School of Biological Sciences at the University of California—Irvine. This four-level structure also provides interim space for the School of Humanities and the Division of Undergraduate Education. The building consists of critical open lab space, lab support and research offices. A key feature is a 400-person tiered, fixed-seat auditorium with a projection booth and state-of-the-art acoustical treatment. The auditorium also serves as a general meeting facility for the entire campus.

Constructed using a modified design-build process, BioSci3 occupies a stately presence at the intersection of the Biological Sciences quadrangle and the campus' Ring Mall. Built on a concrete frame, with exposed cast-in-place concrete exterior shear walls, BioSci3 successfully addresses contextualist challenges of mediating the surrounding architectural styles and scales, and maintaining a "social relationship" to Ring Mall.

The building's foundation is over hard rock, which could have been broken up to allow the basement to go deeper, but by building on the rock, significant cost savings were realized. The only effect of this approach was that the top of the basement extended above ground level. Originally, the project was designed as two buildings. As another cost-saving measure, the two planned structures were combined into one. To accomplish this, the lecture hall was "tucked" between the first two levels of the main building.

Building systems were designed on a grid system to allow technology flexibility. To ensure continued power during an outage, an emergency generator with a backup fuel system was included. A re-circulating system conserves water. Through a superior building thermal envelope, BioSci3 exceeds Title 24 energy requirements by 20 percent.


EXIT









Salt Lake Community College, Larry H. Miller Campus
Sandy, Utah



FFKR Architects

Design team:
Jim Lohse, AIA; Jeff Fisher, AIA

Client:
Salt Lake Community College, Larry H. Miller Campus; Cynthia Bioteau, President

Area:
331,238 sq. ft. (7 buildings)

Total cost:
$36,346,107 (7 buildings)

Cost/square foot:
$109.73 (7 buildings)

Completion:
November 2007

Photographers:
Douglas Kahn; Douglas Barnes/Douglas Barnes Photography

This project includes the master plan and the completion of nine buildings for a community college satellite campus. The master plan has been organized to incorporate elements from various campus settings. Many of the decisions were based on developing a campus layout that uses the rural setting and captures the surrounding natural views while maximizing the ratio of buildable square footage to parking.

The strength of the design is the energy created by the group of buildings as a whole. Although each building is unique, common materials and a similar architectural style give continuity. As Salt Lake Community College grew and adapted to an emerging workforce, a need for a new technical-oriented campus became necessary.

The campus accommodates several specialized fields, including automotive training with a full body-shop classroom (Building 4) and culinary arts with a state-of-the-art demonstration kitchen (Building 6). Buildings 1, 2, 3 and 5 house several programs intended to develop a new generation of entrepreneurs, who can lease space in Building 5. Utah Highway Patrol and other corrections departments have state-of-the-art training facilities and housing in Buildings 7, 8 and 9.











Mount Ida College, New Residence Hall
Newton, Massachusetts











Finegold Alexander + Associates Inc.

Associated firm: Cutler Associates

Design team:
James G. Alexander, FAIA, LEED AP, Principal-in-Charge; Ellen K. Anselone, AIA, LEED AP, Senior Associate/Project Manager; Tony Hsiao, AIA, Design Principal; Rebecca Berry, AIA, Associate/Project Architect; Regan Shields Ives, AIA, Associate/Project Architect

Client:
Mount Ida College; Carol J. Matteson, President

Capacity:
136 beds

Area:
36,195 sq. ft.

Total cost:
$9 million

Cost/square foot:
$248.65

Completion:
July 2008

Photographer:
Anton Grassl/Esto

The architect was commissioned in October 2006 to design a new 136-bed residence hall on the Mount Ida College campus, the former estate of the Robert Gould Shaw family. Increased emphasis on residential life was identified in the master plan as a priority. The college's goal is to house 70 percent of its students on campus in the next five years. Moving quickly toward that goal, the college opted for a fast-track, design-build delivery method.

The $9 million project includes an academic component, small study area, and apartments for a faculty resident and residence-hall assistants. Single and double rooms are broken down into clusters of 20 students housed in pods connected by a glass bridge that serves as common space. Sustainable-design strategies include daylighting and a high-performance envelope and system, as well as solar hot water. Brick and stucco are used in a sharp, clean way, yet still reflect materials used in the main estate building and elsewhere on campus.

University of South Carolina, Arnold School of Public Health

Columbia, South Carolina



The FWA Group Architects

Design team:
Gary R. Lang, AIA, LEED AP

Client:
University of South Carolina; Cheryl L. Addy, Executive Associate Dean

Area:
105,000 sq. ft.

Total cost:
$23 million

Cost/square foot:
$219

Completion:
June 2006

Photographer:
Peter Brentlinger

The Arnold School of Public Health facility was designed to consolidate the school's departments into a single location. The 105,000-square-foot building is the cornerstone of the university's Innovista research campus. Its design is an example of the new, retro style outlined in the university's master plan for its Innovista campus. Components of the facility include research laboratories and the departments of exercise science and environmental health sciences, as well as the Prevention Research Center and the Children's Physical Activity Research Group.

The design incorporated environmentally responsible techniques and strategies, and is designed to achieve LEED silver certification. Sustainable features include alternative transportation options supported by the building design; an underground cistern to collect stormwater runoff; elimination of the heat-island effect on the roof and non-roof areas; daylighting; low-VOC construction; construction waste recycling; recycled flooring materials; and reclaimed paving materials for the parking lot.

The Arnold School of Public Health is the second green building at University of South Carolina.











Metropolitan Community College, Penn Valley Campus, Education Center/Storm Shelter · *Kansas City, Missouri*









Gould Evans Associates

Design team: Tim Woofter, Deb Ford, David Parks, Michael Monceaux, Stacy Heuer, Nicole Peterson, Cynthia Smith	
Client: Metropolitan Community College; Al Tunis, Vice Chancellor, Administrative Services; Darrel Meyer, Director, Physical Facilities	
Capacity: 2,500	**Space/student:** 5 sq. ft.
Area: 19,000 sq. ft.	**Total cost:** $5 million
Cost/square foot: $263	**Completion:** July 2008
Photographers: Kevin Yelton; David Parks	

The intent of the building was to provide conventional instruction space, an expandable meeting room, lecture hall and support spaces. Additionally, the structure had to meet FEMA standards, which included the strength to withstand an F5 tornado and meeting the "five-minute rule," which states the shelter must be within five minutes walking or driving distance from any point on campus.

The campus central courtyard, the only gathering green space on campus, was the site that met the requirements. In order to prevent losing valued green space on campus, the building was designed as a landscape form that would replace the natural green setting, preserving student access to an active outdoor environment.

The structure is partially below ground with a green roof terrace that provides donation opportunities of commissioned art. Generous amounts of natural light were incorporated to minimize a "basement-like" feel for students.

Constructed of concrete and brick masonry that complement the existing campus setting, the building can withstand 250 mph winds and debris.

Salt Lake Community College, Jordan Campus Health Sciences Center · *West Jordan, Utah*



GSBS Architects
Design team: Kevin Miller, Principal-in-Charge; Kenneth Adlam, Project Manager; Scott D. Henriksen, Programming; David Garce, Landscape Architecture; Brandon Bowen, Rendering; Stephanie Ann DeMott, Interiors; Arthur Hoki, Job Captain; Clio Miller, LEED Certification; Tony Yamada, Modeling
Client: State of Utah, Division of Facilities Construction and Management; Bob Askerlund, Facilities Director
Area: 150,000 sq. ft.
Total cost: $29 million
Cost/square foot: $193.33
Completion: October 2007
Photographer: Douglas Kahn







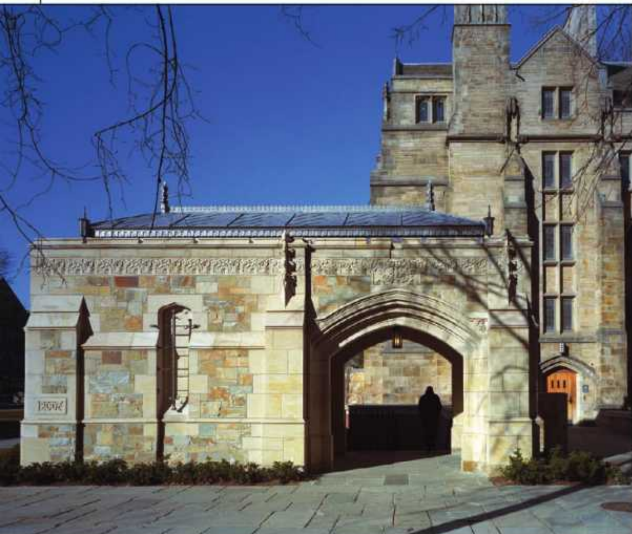




The Health Sciences Center (HSC) is the newest addition to the Jordan Campus of Salt Lake Community College. With a building area of about 150,000 square feet, the project will enable the college to concentrate in a single location functions that provide direct support to the health-sciences programs. The new building includes medical training space for various programs at the college, including biotechnology, medical assistant, medical lab, nursing, occupational therapy, pharmacy, physical therapy, radiological technology, surgical and health administration. In addition to classroom, laboratory and therapeutic training spaces, the center includes a library, wellness center, auditorium, and various levels of student and faculty support.

Orientation of the center and its various components respond to the campus master-planned system of orthogonal, solar and view grids, and is situated along the east side of the main campus plaza. The HSC building comprises four almost-separate structures configured around a central atrium space, which serves as a central organizing element for the building. The high, sloped roof over the atrium—seen from most locations on campus—soars skyward toward the south. Its ridgeline parallels the plaza, and its form responds to the powerful imagery of nearby mountain ranges. The design of the center includes features such as quality indoor air and daylighting in classrooms and common areas, which provides a more healthful learning environment for students and faculty. The center is seeking LEED certification.

Yale University, Bass Library
New Haven, Connecticut



Hammond Beeby Rupert Ainge Inc.

Design team:
Thomas H. Beeby, Gary M. Ainge, Aric Lasher, Michele Silvetti-Schmitt

Client:
Yale University; Alice Prochaska, University Librarian

Capacity:
693 library seats; 24 stand-up stations

Area:
72,383 sq. ft.

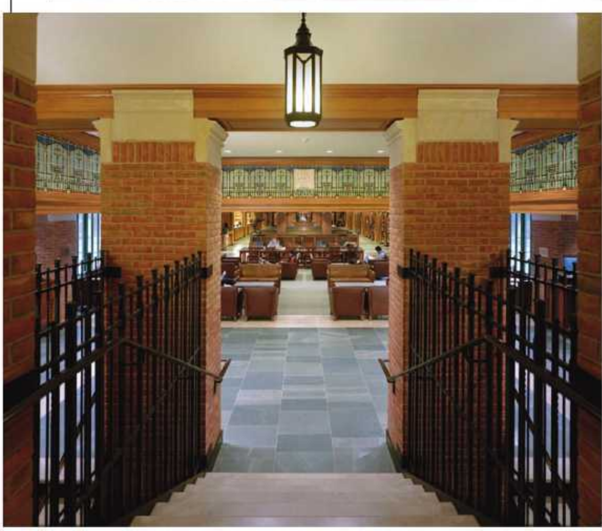
Completion:
November 2007

Photographer:
Timothy Hursley

In the shadow of Yale's historic Sterling Memorial Library, Bass Library accommodates a 50,000-volume intensive-use collection and a variety of study areas in a two-story, 72,000-square-foot underground structure. Connection to Sterling is via tunnel; at the top is a new reading room in a former basement below Sterling's magnificent hall. A new skylighted stone staircase, designed to fit into the architecture of the older building, connects these spaces to the library above. Bass Library replaces the former Cross Campus Library, retaining the structural shell of a minimalist modern, '70s-era facility that was underused and lacked the updated systems required to meet the needs of the modern academic library.

Administrators wanted to strengthen the link between Sterling and Bass, thereby increasing student use of resources available at Sterling—a premier research library. The former facilities no longer accommodated new collection types and current use patterns. Increased use of digital media required technological upgrades. Evolving study patterns—group study and online collaboration—required flexible, innovative spaces.







California State University Northridge, Arbor Grill & Court

Northridge, California









Harley Ellis Devereaux

Design team:
Brent Miller, Principal-in-Charge; Ben Caffey, Designer; Choong Kim, Project Architect

Client:
The University Corporation, California State University Northridge; Tom McCarron, Executive Director

Area:
16,000 sq. ft.

Total cost:
$5 million

Cost/square foot:
$312

Completion:
August 2007

Photographer:
RMA Photography, Inc.

Set among the trees in the heart of the California State University Northridge (CSUN) campus is the Arbor Grill & Court, a food-service pavilion. Situated at the intersection of important student paths, the facility houses a mercantile, the Arbor Grill and the Freudian Sip coffeehouse. Outside the building is Arbor Court, a beautiful courtyard that provides students with a peaceful environment for eating, studying and socializing. The design encourages the use of its natural setting, with almost all seating in the outdoor courtyard. The landscape was designed to break down the massing of seating for variety and privacy.

The structure is a tall glass pavilion constructed within a metaphoric grove of steel trees. These "trees" support both the exterior canopy of trellising and the roof of the pavilion. Tall walls of shaded glass allow the exterior landscape to extend through the pavilion. The geometry of the "trees" reinforces and resolves the geometries of the adjacent buildings.

The facility supports a new trend in education in which support facilities are being used as unconventional learning environments.

California State University Northridge, Sol Center Student Union
Northridge, California



Harley Ellis Devereaux

Design team:
Brent Miller, Principal-in-Charge;
Dan Benjamin, AIA, Designer;
Alex Mikolevine, Choong Kim, Chris Waite, Kyung Kim, Erica Steenstra, Glenn Nordlow, RA

Client:
University Student Union, Inc., California State University Northridge; Debra Hammond, Executive Director

Area:
28,000 sq. ft.

Total cost:
$8 million

Cost/square foot:
$286

Completion:
August 2006

Photographer:
Benny Chan/Fotoworks

The Sol Center is the anchor of the student center complex, a small neighborhood of buildings on the eastern edge of campus. The 28,000-square-foot building, with its mix of academic, social and retail components, is a significant addition to the complex, helping to realize the student's vision of a vibrant "Main Street."

The new student union building is an iconic building for the campus, and the design includes a three-story glass tower at the west entry that is visible from a large part of campus. The design integrates the building and plaza through terraced concentric circles, which enable the building to be a bold backdrop for the events held in the adjacent performance space.

It is the home for student clubs and organizations, as well as a place for formal and casual meetings, study and relaxation. A large computer lab and conference room are included for student use, as well as lounges for more casual gatherings. Union administrative functions also are part of the new facility and include human resources and business offices. The facility also contains a privately run coffeehouse and an adjacent market to provide a casual gathering spot and convenient shopping as part of the student center complex.











University of Southern Maine, Residence Hall
Gorham, Maine







This four-story, 101,000-square-foot, 296-bed residence hall provides a variety of year-round living options for students, including single four-bedroom apartments and double-bedroom suites. Two apartments for the resident staff are situated on the ground floor at the end of each wing.

Circulation, both pedestrian and vehicular, as well as the internal circulation, established the design concept. A west entrance from the student parking area and an upper east entrance both must flow into one central lobby control area. The challenging site, a former waste area on a steep slope and major corner of the campus, amplifies the form of the building. The concept is articulated through a five-story, slightly rotated tower at the corner of the site, which anchors the two residential wings.

Establishing the language and expression of the brick building with vertical metal siding is an interpretation of the campus' existing 1950s architectural style. The high-tech modern architecture is predominant on the northwest end of the campus. The living room bay window in each suite adds relief and scale to the facade while articulating the residential character.

Daylight is brought into the building to foster creativity and interaction. A light-filled student lounge area adjacent to the lobby provides comfortable seating with windows on three sides. The west terrace is adjacent to the game room on the ground floor and provides an outdoor gathering and presentation area. State-of-the-art meeting rooms are adjacent to the lobby so that students have every tool available to enhance their academic experience.

Energy-efficient design of the mechanical and electrical systems; daylighting-conscious design; creative use of energy-management and monitoring systems; sun-control devices; and the use of building materials with recycled content all contribute to a LEED-gold registered building that respects the environment.

Harriman

Design team:
Patrick S. Costin, AIA, LEED AP, Principal-in-Charge; Judy L. Johnson, AIA, LEED AP, Associate Principal; Timothy R. Hart, AIA, LEED AP; Daniel Fournier, Designer; B. Keith Brenner, PE, Structural Engineer; Richard D. Miles, LEED AP, Senior Mechanical Designer; Phillip R. Morrissette, PE, Senior Electrical Engineer

Client:
University of Southern Maine; Joseph Wood, Interim President

Capacity:
296

Area:
101,000 sq. ft.

Total cost:
$16.2 million

Cost/square foot:
$160

Completion:
August 2007

Photographer:
Blind Dog Photo









"Creating a residence hall that, in and of itself, would be part of educating future generations of residential students was a professional challenge for me personally, and our team (architects, faculty, students and university staff) was equally excited by the intriguing opportunities that it presented."

—Denise Marcoux Nelson, Director of Residential Life and Resident Education





Bridgton Academy, Humanities Center
North Bridgton, Maine



Harriman	
Design team: Daniel W. Cecil, AIA, Principal; Anthony J. Roy, Designer; James C. Fortin, PE, Structural Engineer; Frank L. Crabtree, PE, LEED AP, Civil/Environmental Engineer; David B. Reinheimer, PE, Mechanical Engineer; Peter R. Arnold, Electrical Designer	
Client: Bridgton Academy; David Hursty, Headmaster	
Capacity: 213	**Space/student:** 81 sq. ft.
Area: 17,160 sq. ft.	**Total cost:** $3.2 million
Cost/square foot: $186	**Completion:** May 2006
Photographers: KucinePhoto; Gary Langley/Blind Dog Photo, Inc.	



This contemporary humanities building is situated high on a hillside overlooking picturesque Long Lake at the heart of Bridgton Academy's 55-acre campus. The building defines an academic quad that features a small stone amphitheater.

The building includes a 3,875-square-foot library, a 60-seat auditorium, four high-tech seminar rooms, a multipurpose classroom, administrative offices, a reading center and a writing center. The facility provides students with cutting-edge research technologies, including comprehensive databases, audiovisual equipment, interactive whiteboards and wireless capabilities.

The second floor is home to the academy's new library. A large, arched entry provides a panoramic view of the northeast. The library's interior features exposed, heavy-timber trusses, decorative columns and cathedral ceilings. The custom red-oak millwork provides a warm and inviting collegiate ambience. Windows were placed strategically to provide natural light and framed views. Library stack areas are naturally lighted by windows at the ends of each aisle. Students take advantage of the spectacular peaceful views of the surrounding mountains and Long Lake.

The library's openness created from the vaulted ceilings and spacious rooms helps provide a warm atmosphere. Reading and writing labs are adjacent to the library to give students access to reference materials and technology. Transparency is achieved intentionally through glazing to allow visual control of the reading and writing labs, and the library from the librarian's office. The new library has various-sized study spaces to promote group interaction.





University of Tulsa, Collins Hall Welcome Center

Tulsa, Oklahoma



Hastings & Chivetta Architects, Inc.

Design team:
Chris Chivetta, Principal-in-Charge; Don Keane, Project Manager; Nick Kattentidt, Project Architect; Al Wolf, Design Architect; Bob Bohack, Project Architect; John Mickeletto, Project Architect

Client:
University of Tulsa; Robert Shipley, Director of Physical Plant for Construction Utilities

Area:
39,103 sq. ft.

Total cost:
$7,610,997

Cost/square foot:
$194.63

Completion:
July 2007

Photographer:
Fentress Photography









The two-story Collins Hall Welcome Center is situated at the end of a new three-block-long campus green, which runs perpendicular to a major thoroughfare at the edge of the University of Tulsa.

The 39,103-square-foot building signals arrival at the TU campus, and becomes the new gateway for the campus with a three-story stone and glass entry tower. The exterior reinforces the Collegiate Gothic building style found on campus by using a rich Aslar stone mixed with stone trim and slate tile roofs.

The conditions of the facility were challenging because of a constrained site, so a one-story addition was placed on top of the existing facility.

Collins Hall features a 2,000-square-foot "living room" that serves as the lobby. It is designed for comfort, yet flexible enough for special events, along with adjacent patios that overlook the campus. The high windows, as well as various lighting elements throughout, allow it to be used for either day or evening gatherings.

Collins Hall houses the TU president's administrative suite, alumni offices, development offices and the Heritage Room, which will display TU's storied history and accomplishments prominently. In one location, it gathers many student-focused functions, including financial aid and admissions, to serve student needs better.

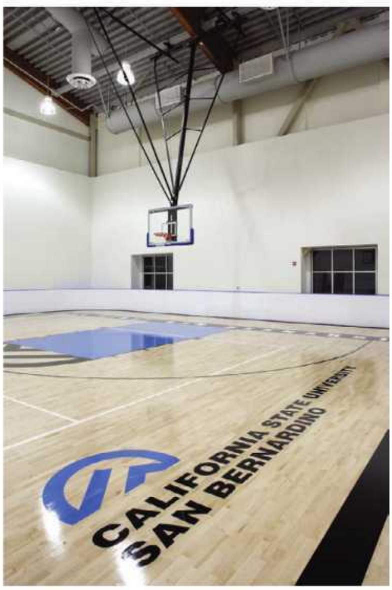
California State University—San Bernardino, Student Recreation Center · *San Bernardino, California*











Hellmuth, Obata & Kassabaum, Inc. (HOK)

Design team:
Pat Tangen, Sport HOK S+V+E; David Bock, Sport HOK S+V+E; Ernest Cirangle, Vice President; Doug Fisher, PM; Paul Nagashima, Senior Project Designer; Julie Huang, AIA; Brett Shwery, Senior Vice President of Interior Design

Client:
California State University—San Bernardino; David DeMauro, Vice President for Administration & Finance

Area:
34,400 sq. ft.

Total cost:
$11,042,400

Cost/square foot:
$321

Completion:
March 2007

Photographer:
Lawrence Anderson Photography, Inc.

The Associated Students approved the use of its own funds to build a new Student Recreation Center to replace a temporary structure on campus.

In addition to providing a much-needed recreation center, the new state-of-the-art facility will assist in student recruitment. The new recreation center features a gym with cardio, free weights and a rock climbing wall; aerobic studios; a multipurpose room; and wellness center.

In order to maximize flexibility and minimize structural impacts, the architect designed a clear-span, glu-laminated wood beam and deep-span metal deck structural system, reducing capital expenditures. Additionally, a lively social setting, a "gallery" circulation space, links the various functions of the building in order to provide a visual and physical connection among all public areas.

Because the university anticipates continued growth and an increase in the student body, the recreation center was designed for future expansion and renovation.

Virginia Western Community College, Webber Hall Addition and Renovations · *Roanoke, Virginia*



HSMM AECOM (Hayes, Seay, Mattern & Mattern, Inc.)

Design team:
Michael Brennan, AIA, Principal-in-Charge; Bob Merrill, PE, LEED AP, Project Manager; Jon Stephenson, AIA, Architect; Kim Hardy, LEED AP, Architectural Designer; Barry Band, PE, Structural Engineer; Ron Bessette, PE, Mechanical Engineer; Joey Caldwell, PE, FPE, CPD, Plumbing/Fire Protection Engineer

Client:
Virginia Western Community College (State Board of Community Colleges, Virginia Community College System); Kevin Witter, Director of Facilities Planning and Development

Capacity: 1,136 (students and staff)	**Space/student:** 42.12 sq. ft.
Area: 47,843 sq. ft.	**Total cost:** $4,779,985
Cost/square foot: $99.91	**Completion:** May 2007

Photographer:
Chris Cunningham











Virginia Western Community College's (VWCC) vision to refocus its mission from predominately vocational education to information technology and engineering was advanced significantly with the addition and renovations to Webber Hall. The addition becomes VWCC's bridge to the future, incorporating a dean's office, demonstration computer laboratories, distance learning and multimedia classrooms.

VWCC is bisected into north and south campuses by a busy street adjacent to Webber Hall. The hall's main corridor and the adjoining pedestrian bridge are students' primary link between these two campuses. The third-floor corridor has been expanded to become both a pedestrian boulevard connecting north and south campuses and a central gathering place. Webber's renovations also enhanced vertical circulation and improved campuswide handicapped accessibility significantly.

The addition's modern architectural expression creates a high-tech image consistent with the college's mission and relates to recent renovations. The skewed entry design responds to existing angular pedestrian plazas, extending these outdoor spaces and defining the main entrance. The stair tower's visual transparency provides both an illustrative engineering lesson for students and an iconic beacon to the community.

The College of New Rochelle, The Center for Wellness

New Rochelle, New York



ikon.5 architects

Design team:
Joe Tattoni, AIA; Charlie Maira, AIA; Michael Zareva; Debbie Rockey; Ben Petrick, Shawn Daniels, Chetan Potar

Client:
The College of New Rochelle; Judith Huntington, Vice President for Finance

Area:
55,000 sq. ft.

Total cost:
$24 million

Cost/square foot:
$436

Completion:
June 2008

The Center for Wellness at the College of New Rochelle is a paradisical garden for the exultation of the body. The center is a sheltered meditation precinct removed from the urban distractions that surround it. Each major program component is metaphorically inspired by a natural land form of the garden. The pool is the grotto, the gymnasium is a rock outcropping, and the concourse that connects the gym to the pool is a stone crevasse cut deeply into the gently sloping site.

The project embraces sustainable-design strategies. For example, using the site topography, the lower level and pool are set beneath a contemplation roof garden. Maximizing the advantages of the site topography by placing 30 percent of the building beneath a grass roof is one of the many features that allows this project to qualify for a LEED silver rating.

The center includes a 1,500-seat gymnasium, six-lane competition pool, fitness center, holistic meditation room, classrooms and lockers/showers.











Montclair State University, Café Diem
Montclair, New Jersey



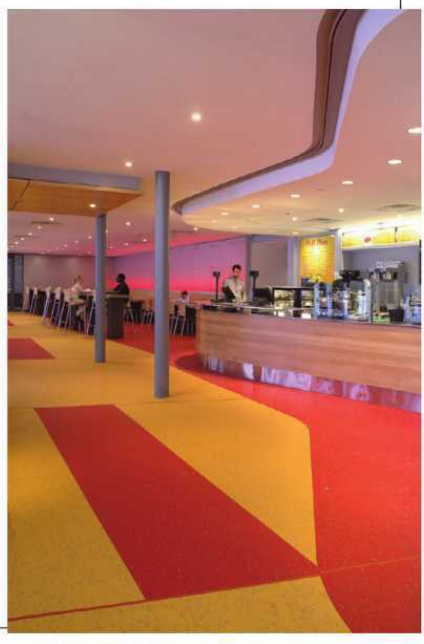
ikon.5 architects

Design team:	Arvind Tikku, AIA; Dan Cummings, RA
Client:	Montclair State University; Judith Lin Hunt, Dean, Library Services
Area:	4,600 sq. ft.
Total cost:	$1.5 million
Cost/square foot:	$326
Completion:	March 2007
Photographer:	James D'Addio

The cyber cafe at Montclair State University is an addition to the university library. Constructed at the front door of the library and adjacent to a campus quadrangle, the sleekly modern cafe is an immersive interactive space that blends food, socialization and collaborative work areas. Its purpose is to provide supplemental learning environments to the library that are casual and interactive to accommodate a growing demand for places where faculty and students can meet, converse and work together.

A glass wall blurs the distinction between inside and out. The cafe and cafe terrace cascade down broad and generous steps to the campus green. The interior tone is set by the richness of stone and wood flooring, the playfulness of a backlighted LED wall, and the smooth simplicity of a clean ceiling plane.









Emory University, Robert C. Goizueta School of Business, Center for Doctoral Research and Education · *Atlanta, Georgia*









Kallmann McKinnell & Wood Architects, Inc.	
Associated firm: Sizemore Group, LLC	
Design team: KMW: Bruno Pfister, Fiske Crowell; Sizemore: Lily del Berrios, Ben Darmer, Henry Cantwell, Christine Czyzewski, Clara Azcumes de Ojeda	
Client: Emory University; Joanna Green, Director of Finance	
Area: 85,000 sq. ft.	**Total cost:** $19,975,000
Cost/square foot: $235	**Completion:** July 2005
Photographer: Harrison Northcutt Photography	

The program for the Center for Doctoral Research and Education consists of two major components: the executive education facilities and the business school PhD programs.

The building was planned to extend the architectural character of the original business school, which was built five years earlier, while expressing the unique functions and programmatic mission of the center.

The Center for Doctoral Research and Education forms a new campus quadrangle with the existing building for the Business School and the Schwartz Performing Arts Center. The building consists of five floors and contains about 85,000 square feet. Five tiered and flat classrooms with breakout spaces, lounges and a cafe are on the three lower floors; faculty, PhD and administrative offices are on the top two floors. A major dining room for 200 occupies part of the top floor and has an outdoor terrace that overlooks the courtyard.

The Goizueta Foundation Center is expected to achieve LEED gold certification from the U.S. Green Building Council.

University of California—Riverside, Physical Sciences Building I

Riverside, California



Kallmann McKinnell & Wood Architects, Inc.

Associated firm: Wou & Partners

Design team:
KMW: Michael McKinnell, Rayford Law; Wou & Partners: Michael Franklin Ross, Antoinette Crespin, Kevin Daly, Deeing Chu

Client:
University of California; Theodore Chiu, Principal Architect

Area:
130,765 sq. ft.

Total cost:
$41,350,000

Cost/square foot:
$316.21

Completion:
March 2005

Photographer:
Tom Bonner

Physical Sciences Building I is an integral part of the University of California—Riverside campus expansion. This state-of-the-art, multidisciplinary research building provides 51,200 square feet of research laboratories; 6,750 square feet of laboratory support; 5,050 square feet of upper-division teaching labs and support; plus 9,100 square feet for faculty offices, conference/seminar rooms and departmental administrative spaces.

The four-story building creates a U-shaped courtyard facing south onto Science Walk; the primary entrance fronts this major campus thoroughfare and addresses the courtyard. From the entry, the main stair connects the centrally situated faculty and administration offices on all four floors. Each floor contains research labs, which are programmed to accommodate activities in synthetic, hybrid and instrumental chemistry. Instructional labs and conference rooms are provided on the second floor.

The palette of materials for the building draws its inspiration from historical precedents on campus: wheat-colored Norman brick accented with limestone string and base courses. Exposures to the sun feature a matrix of aluminum sun-shading screens capped by a projecting eave.











University of Missouri—Kansas City, Health Sciences Building, School of Pharmacy and School of Nursing · *Kansas City, Missouri*









The building provides 206,585 square feet of instructional, teaching and research laboratories; administrative, faculty, student and support spaces for the School of Pharmacy and the School of Nursing; and shared support facilities for the Hospital Hill Campus. The formerly disparate components of the schools of nursing and pharmacy were combined in this new facility, addressing current and anticipated future space needs, and creating an interactive interdisciplinary Health Sciences Community.

The project on Hospital Hill joins the adjacent School of Medicine and School of Dentistry, per the 2002 campus master plan. In this context, creating two green spaces, in what previously had been a parking lot, was critical to establishing a "sense of place."

Laboratories reflect modular design principles developed from benchmark criteria for academic research workstations, aisles and equipment dimensions. Modular planning provides flexibility for future research accommodations, requirements and technological advances. In addition to "wet" labs, the project provides simulated hospital environments with computerized animatronic patients; large and small classrooms; a student lounge, cafe and locker facilities; and a small library. A large vivarium is situated under the front courtyard.

Kallmann McKinnell & Wood Architects, Inc.

Associated firm: The Clark Enersen Partners, Architect of Record

Design team:
KMW: Ted Szostkowski, Rayford Law, Martin Dermady, Jason Hart; Clark Enersen: Rick Wise, Greg Lattig, Tim Reynolds

Client:
University of Missouri—Kansas City, Robert A. Simmons, AIA, Assistant Vice Chancellor, Facilities

Area:
206,585 sq. ft.

Total cost:
$33 million

Cost/square foot:
$159.74

Completion:
September 2007

Photographer:
Eric R. Berndt/P-Tn Photography

Wesleyan University, Suzanne Lemberg Usdan University Center
Middletown, Connecticut





Kallmann McKinnell & Wood Architects, Inc.

Design team:	Bruce Wood, Anne Tansantisuk
Client:	Wesleyan University; Alan Rubacha, Capital Projects Manager
Area:	87,000 sq. ft.
Total cost:	$38 million
Cost/square foot:	$436.78
Completion:	August 2007
Photographer:	Robert Benson Photography

The Usdan University Center was intended to revitalize the core of Wesleyan's Campus, to create an intellectual marketplace, and to provide student services for dining, cafe, meeting, post office, bookstore and student organizations. A ballroom/performance space, and dance and theater studios are common-use areas.

The urban design of the project created a new passage from Wesleyan's Andrus Field to the adjacent Center for the Arts.

The design involved the removal of a gymnasium, the reuse of a historic gym, a new structure to house the primary spaces, and a complex food-service infrastructure. The assembly of buildings integrates with the historic buildings of Wesleyan's college row by form, scale and materials.

The University Center creates important common spaces for the campus, including an atrium cafe, large dining/study spaces and a ballroom in the space of the 19th-century gym, retaining its original timber trusses and wood ceiling. In Usdan, three levels of terraces overlook Andrus Field, the center of the campus.

The project, realized in brick, brown-stone, slate, terrazzo and oak, opened in 2007.











Bucks County Community College, Lower Bucks Campus

Bristol, Pennsylvania









KCBA Architects

Design team:
Robert Kelly, AIA, Principal Designer;
Eric Gianelle, AIA, Project Manager;
Kurt Kroszner, RA, Project Architect;
Snyder Hoffman Associates, MEP Engineer;
Pickering Corts & Summerson, Inc., Civil Engineer

Client:
Bucks County Community College;
James Linksz, President

Capacity:
822

Space/student:
72 sq. ft.

Area:
60,000 sq. ft.

Total cost:
$15,667,690

Cost/square foot:
$261

Completion:
January 2008

Photographer:
Barry Halkin Architectural & Interior Photography

In need of a new campus to serve the southern region of Bucks County, Pa., college trustees formed a partnership with a regional financial institution to purchase and develop an 18-acre tract of land adjacent to a nature preserve.

The challenge was to orient two 60,000-square-foot buildings to take advantage of the nature area to the north and create a college green shielded from an active commercial zone to the south and west.

One of the two buildings has been completed to date. Both schemes feature sustainable strategies, such as proper orientation. Exterior elements shield harsh southern light and invite northern light via glazed walls that also provide views to the natural setting.

The completed building is organized around a meandering street-type spine. At the heart of the layout is a large central commons that features inviting furniture and a fireplace.

State-of-the-art classrooms, large-group rooms, labs, offices, and indoor and outdoor nontraditional collaborative learning spaces characterize this facility that offers functionality and amenities typical of a four-year institution.

Northern State University, Technology Center
Aberdeen, South Dakota



Koch Hazard Architects

Design team:
Christopher M. Schiltz, Principal-in-Charge; Jeffrey R. Dolan, Project Manager

Client:
Northern State University; Patrick Schloss, President

Area:
39,000 sq. ft.

Total cost:
$5,140,000

Cost/square foot:
$132

Completion:
December 2006

Photographers:
Brian Rotert; Steve Parezo

The Technology Center is an addition to an existing, three-floor, U-shaped building on the campus of Northern State University (NSU) in Aberdeen, S.D. The addition, situated at the end of the formal campus quadrangle, provides both literal and mission-based focus for the university.

Administrators wanted the new facility to reflect the campus' changing mission. NSU originally was a teacher's college. Now, the technology center sends instruction to schools throughout the state via electronic classrooms. The main program goal was to enhance learning with "smart" classrooms, technology fellow and faculty offices, student technology support and computer repair facilities, broadcast and recording studios, laboratories, and testing and software support areas. One of the challenges was keeping the new floor plates as thin as possible to match the existing building's floor-to-floor heights, allowing adequate space for exposed systems. Interior classrooms and offices receive daylight from high ribbon-glass in the feature wall adjacent to the corridor and curtainwall.

This addition provides the campus with a strong focus and positions the university as a regional leader in technology education.











St. Lawrence University, Johnson Hall of Science
Canton, New York



KlingStubbins

Associated firm: The Croxton Collaborative

Design team:
Peter Blewett, AIA, Principal-in-Charge (through construction drawings and construction); Richard Green, AIA, Principal-in-Charge (through design development); William Ralston, RA, CSI, CCCA, Project Manager; Croxton Collaborative: Randolph Croxton, Principal-in-Charge; Michael Gulich, Project Manager

Client:
St. Lawrence University; Daniel F. Sullivan, President

Capacity:
1,780

Area:
114,285 sq. ft.

Total cost:
$31,240,639

Cost/square foot:
$273

Completion:
September 2007

Photographer:
Woodruff/Brown Photography







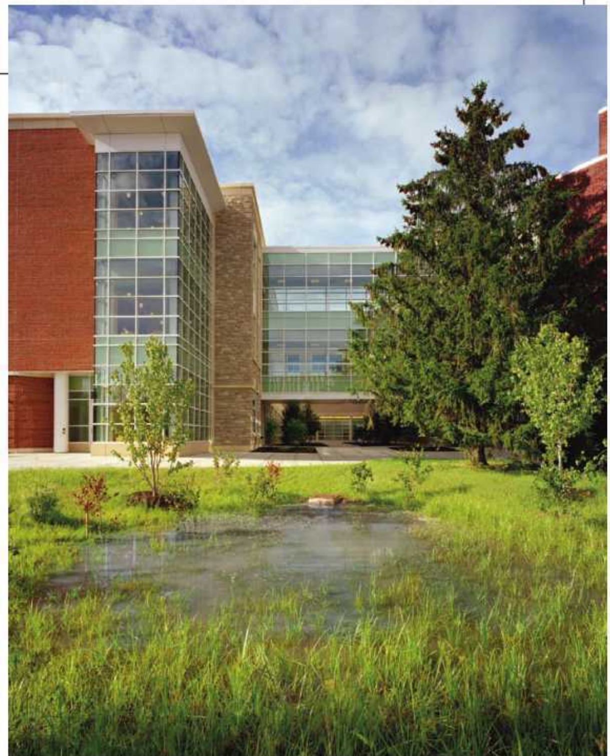
St. Lawrence University is building the future of science education with its Phase I project of a four-phase plan. Johnson Hall of Science is a new facility for biology, chemistry, biochemistry, neuroscience and psychology. All science education in Johnson Hall is experiential and researched-focused for students at all levels. Main program elements include laboratories and teaching spaces, offices and support spaces.

The architectural presence and compatibility with existing campus buildings were the foremost determining factors in the selection of exterior building materials. Brick and stone are the two most prominent materials of the building. A campus standard Cushwa Georgian brick is used as the main material of the east and west elevations, along with portions of the north and south elevations. Synthetic stone masonry units of two different finishes were chosen to complement the natural stone expressed in other prominent campus buildings.

Sustainable-design strategies, such as orienting the building on a true north-south axis and separating the building into two connected wings, result in a maximum effort to harvest daylight into all prime program areas. Energy-conservation techniques, such as daylight dimming of light fixtures, were employed for all phases of the project.

St. Lawrence University's Johnson Hall of Science was awarded LEED gold certification in 2008 for its commitment to sustainable design.







"The Johnson Hall of Science is an incredible addition to our campus. Positioned almost at the center of campus, its design captivates almost every visitor. Its functionality is most appreciated by faculty and students alike."

—Thomas F. Coakley, Vice President for Administrative Operations





Sam Houston State University, Raven Village

Huntsville, Texas









KSQ Architects, PC

Associated firm: PDG Architects

Design team: Lindsay Reeds, David Short, Garret Krishan, Linda Kress, Dave Roberts		
Client: Sam Houston State University; John F. McCroskey, Assistant Director of Facilities and Construction		
Capacity: 408 beds; 211 units	**Space/student:** 380 sq. ft.	**Area:** 154,500 sq. ft.
Total cost: $18.1 million	**Cost/square foot:** $117.15	**Completion:** July 2006
Photographer: Beth Tracy		

The Raven Village at Sam Houston State University in Huntsville, Texas, provides much-needed upper-class housing on the edge of campus near its south entrance. The residential community includes 408 beds in one- and two-bedroom apartment-style units and surface parking for 344 cars. Because of the site's gateway location, the T-shaped, four-story wood frame, brick and stucco building was pushed forward to the street. Study lounge towers situated at the north and south building corners anchor the hall to its site. Parking was pushed to the interior and reduced to several smaller lots to minimize impact and increase accessibility.

Neighborhoods consist of 29 to 35 residents, each supported by a resident adviser and each having a study lounge near the center of the community. The convergence of all communities happens at the center of the buildings including, at the ground floor, an entry plaza and outdoor seating for a convenience store, mailroom and laundry; at the second floor, a TV room, game room, kitchen/dining and a vending area; and at the third and fourth floors, faculty and administrative offices, classrooms and lounges. A skylighted open-air atrium spatially links first- and second-floor common functions.

University of Arkansas Little Rock, University Commons Apartments · *Little Rock, Arkansas*



KSQ Architects, PC

Design team:
Lindsay Reeds, David Short, Garret Krishan, Linda Kress

Client:
University of Arkansas Little Rock; Cynthia Milazzo, Associate Vice Chancellor for Finance and Administration

Capacity:
326 beds; 215 units

Space/student:
426 sq. ft.

Area:
138,934 sq. ft.

Total cost:
$19,073,794

Cost/square foot:
$137.29

Completion:
August 2006

Photographer:
Laura Wainwright





North and South Halls are intended to help transform the University of Arkansas Little Rock campus from a predominately commuter campus to a residential campus. Two new L-shaped, six-story residential buildings occupy the northeast and southeast corners of a rectangular site. Additionally, the halls are connected by a new two-story commons building. The commons building and residence halls unite with an existing five-story residence hall (East Hall), along the site's eastern edge, to form a quad. Architectural language derived from East Hall provides a clear sense of continuity.

Each wing has 163 residents in two- and four-bedroom apartment-style configurations. Each floor of each wing is a community of about 40 students with a small study. However, most of the social space is in the new commons building. The commons, with its clock tower, is viewed as an anchor and a center of student activity for residential life on campus. It includes a mailroom, convenience store, large lounge and activity center. Residence-life offices and classroom space are on the second floor. A colonnade along the eastern street edge connects all residential wings.





University of California—Irvine, California Institute of Telecommunications and Information Technology (Cal IT²)

Irvine, California





Leo A Daly

Associated firm: Johnson Fain Partners

Design team:
Leo A Daly, Architect of Record: Ed Buch, Jason Kim, Cristina Carnabatu; Johnson Fair Partners, Design Architect: Scott Johnson, Andy Curd, Roy Follmuth, Wayne Meinyk, Pat Klein; PCL Construction Company, Contractors

Client:
University of California—Irvine; Rebekah Gladson, Associate Vice Chancellor, Campus Architect

Area:
68,700 sq. ft.

Total cost:
$37,608,620

Cost/square foot:
$547.43

Completion:
January 2006

Photographer:
Nick Merrick

A state-of-the-art facility at the University of California—Irvine, Cal IT² combines the arts, engineering and information technology to address large-scale societal issues.

Sponsored by the governor's office, Cal IT² provides research in telecommunications and information technology, stimulating California's economic growth. Cal IT² teams campus professionals with telecommunications and software companies to research technology for the "New Internet."

Partnering with UC—San Diego, Cal IT² is designed to investigate how the Internet will advance environmental science and energy, transportation, medicine, artistic expression, industrial management and education.

With four stories and two wings, Cal IT² provides 119,500 square feet of interdisciplinary research laboratories, offices and conference facilities, arranged vertically in five interacting "layers."

The dramatic four-story atrium, the building's focus, is a communication center with 3-D multi-megapixel, interactive, wall-sized screens. A glass prism curtainwall connects the atrium's interior visually with the landscaped courtyard.

Shortly before construction, donor funding was reduced by $5 million. To overcome this unexpected shortfall, the design team met both the original design and budget goals creatively, protecting a matching grant.

Cal IT² has a concrete frame with precast panels inset with brick banding, adding texture and color. Both the main body and the smaller wing are constructed of cast-in-place concrete shear walls with integral color and sandblast finish.

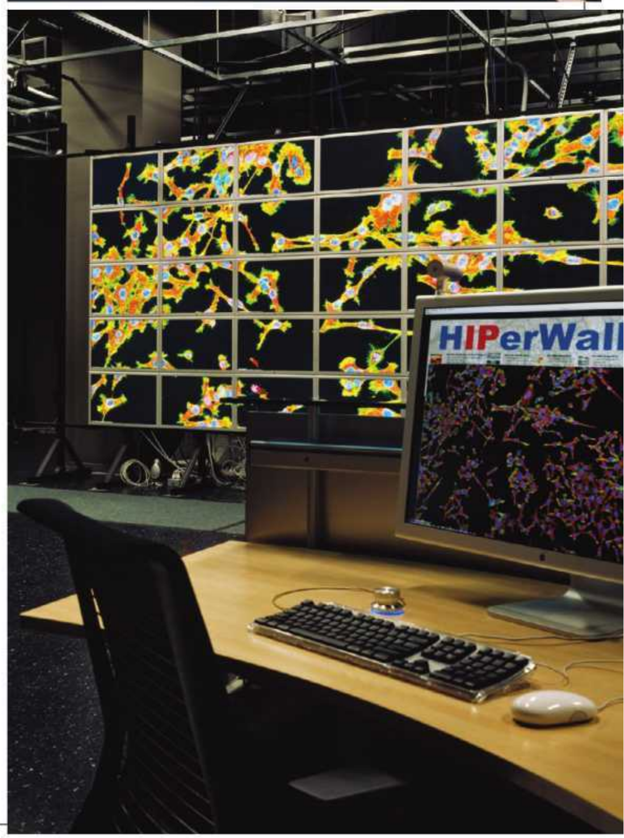
Featuring wireless Internet access, the university's first voice-over-IP phone system, and customized networks, Cal IT² offers access to high-speed fiber-optic networks.

Incorporating energy-saving design, the project exceeded California's energy-code standards by 20 percent. Cal IT² was completed on schedule and came in $500,000 under budget.








HIPerWall

Roberts Wesleyan College, Golisano Library
Rochester, New York







Leo A Daly

Associated firm: SWBR Architects

Design team:
Leo A Daly: Tom Findley, Principal-in-Charge; David Hawes, Project Manager; Nancy Novak, Interior Designer; SWBR: Dave Beinetti, Principal-in-Charge; Randy Sickler, Project Manager; Rohit Agrawal, Project Architect

Client:
Roberts Wesleyan College; John Martin, President

Capacity: 457	**Space/student:** 94 sq. ft.
Area: 43,000 sq. ft.	**Total cost:** $8.7 million
Cost/square foot: $203	**Completion:** August 2007





Situated on a highly visible and prominent corner of the campus, Golisano Library offers an icon of higher learning to Roberts Wesleyan College.

Golisano Library was designed with four major objectives in mind:

1. Provide increased space for reader collection.
2. Provide invigorating and collaborative study environments.
3. Complement and elevate the architectural language of the Roberts Wesleyan campus.
4. Illustrate the educational value of a sustainably designed library facility.

An inviting entrance and plaza engage the heart of the campus—strengthening the relationship between interior and exterior spaces. Inside, the Learning Commons allows for interactive opportunities among students, staff and the community. This "architecture of interaction" encourages increased use, both by day and night. The coffee shop, fireplaces and reading lounges make this dynamic study space all the more attractive.

The facility features daylight, geothermal heat pumps and natural resources. Sustainable-design techniques and materials were considered throughout the entire process and contributed to the facility's LEED-NC silver certification.

The presence of the new Golisano Library is one of substance, permanence and respect.

Johnson & Wales University, Xavier Auditorium
Providence, Rhode Island



Lerner | Ladds + Bartels, Inc.

Design team:
Cavanaugh Tocci Associates, Acoustics; Shanix, Audio/Video; Gaskell Associates, Electrical; earleylight, Lighting; Wilkinson Associates, Mechanical; Odeh Engineers, Structural

Client:
Johnson & Wales University; Marco Maio, Project Manager

Capacity:
553

Area:
13,500 sq. ft.

Total cost:
$2.9 million

Cost/square foot:
$214

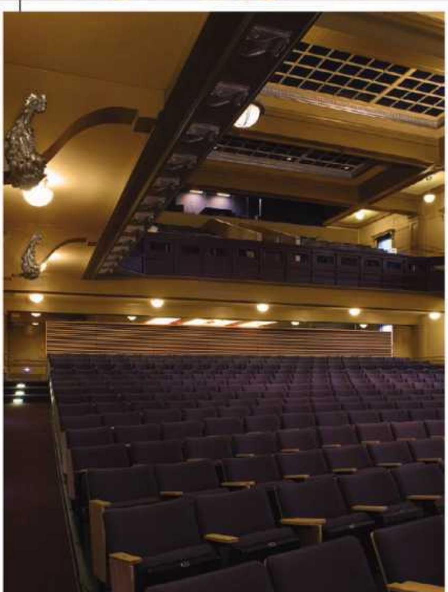
Completion:
September 2007

Photographers:
Warren Jagger Photography; Lerner | Ladds + Bartels (before)

Xavier Academy Hall was built decades ago as a Catholic school on a site bordering both an industrial district and a university campus. Over time, it had fallen into disrepair.

Johnson & Wales University, the current owner, asked the architect to renovate the auditorium space in order to create a 500-seat venue for university functions and gatherings, as well as a theater for student use. The theater space received a full renovation. The rake of the auditorium and balcony was adjusted, and the seating layout was reconfigured to ensure that each seat has a good view of the stage. Paying close attention to acoustics, the architect designed a series of panels and screens to flank the stage, reflecting sound into the audience while concealing speakers and lighting, and effectively expanding the proscenium enclosure to embrace the extended stage.

Other features include a new audiovisual system with distance-learning capabilities, a new HVAC system, improved accessibility for those with disabilities, and new lavatories, making the theater a self-sufficient entity.







California State University—San Bernardino, College of Education Building · *San Bernardino, California*



LPA Inc.

Design team:
Chris Torrey, AIA, LEED AP; Glenn Carels, AIA, LEED AP; Young Min, LEED AP

Client:
California State University—San Bernardino;
David DeMauro, Vice President for Administration and Finance

Area:
130,000 sq. ft.

Total cost:
$40 million

Cost/square foot:
$307

Completion:
September 2008

Photographers:
Douglas E. Barnhart, Inc.; LPA



The university's College of Education was operating out of several buildings. The challenge was to provide a center that brought the programs and functions together in one state-of-the-art facility. Moreover, it was important to create a home that was large enough to house the entire college while remaining architecturally pleasing, environmentally smart and energy efficient.

Despite being situated in desert terrain, most of the campus is blanketed by lush green lawns and shrubs in a beautiful park-like setting. As a means of expanding sustainable site concepts, the landscaping of the new College of Education building features lavenders and other perennial flora that promote the region's natural desert habitat.

The 130,000-square-foot, three-story structure also expresses the College of Education's presence uniquely, energizes the university, and provides a new home to future educators.

The College of Education building is the place where brilliant minds are equipped to educate the leaders of tomorrow—the place where students become teachers.





Rendering





Franciscan University of Steubenville, Sts. Louis and Elizabeth Residence Halls · *Steubenville, Ohio*







MacLachlan, Cornelius & Filoni, Inc.

Design team:
Albert L. Filoni, Principal-in-Charge; Alan F. Hohlfelder, Senior Project Manager; Benjamin T. Wetmore, Project Manager/ Architect; John R. Cleary, Specifications Writer

Client:
Franciscan University of Steubenville; Father Terrence Henry, T.O.R., President

Capacity:
180

Area:
47,000 sq. ft.

Total cost:
$9 million

Cost/square foot:
$191.48

Completion:
August 2007

Photographer:
Denmarsh Photography





Sts. Louis and Elizabeth Halls welcomed resident students in the fall 2007 semester. The 47,000-square-foot, 180-bed, three-story brick structure features separate wings for men and women. Each wing provides students with private study rooms, laundry facilities, lounge space and a common room where designated "households" can gather for discussion, Bible study, prayer or family-style entertainment.

Male students reside in St. Louis Hall, and St. Elizabeth Hall houses women. Between the two halls, a main entry connector wing provides common, mixed-gender spaces, such as a large living room with fireplace, kitchen, dining room and group-study spaces. Also situated in the connector wing are a 50-seat chapel, and an open stair that connects the three levels and promotes interaction among students who live on different floors.

The design complements the style of surrounding buildings on campus and provides a new outdoor community space featuring a fountain, grill area and stage.

Longwood University, Health and Wellness Center
Farmville, Virginia





Moseley Architects, PC

Associated firm: Hastings & Chivetta Architects, Inc.	
Design team: George Nasis, AIA, Managing Principal; Jeffrey Hyder, AIA, Project Manager; Donald Bowman, Project Architect; Stephen Lyons, PE, Mechanical Engineer; Bryna Dunn, AICP, Director of Environmental Planning and Research; Robert Baxter, AIA, Construction Administration	
Client: Longwood University; David Pletcher, Facilities Manager	
Capacity: 2,211	**Area:** 74,683 sq. ft.
Total cost: $12,977,000	**Cost/square foot:** $173.76
Completion: August 2007	**Photographer:** Maylone Photography

Longwood University needed a state-of-the-art recreation facility to enhance the quality of student life on campus and strengthen academic recruiting opportunities.

The center offers two basketball courts, a multi-athletic court, an exercise area with the latest equipment, a climbing wall, two racquetball courts, three multipurpose rooms for aerobic activities, an elevated running track, a student recreation office suite and a wellness/counseling office suite. The building sought LEED certification from the onset of planning and design. It was designed to educate the facility's users and campus community about sustainable design concepts and provide a more healthful indoor recreation environment.

To achieve LEED certification, the design team included water-efficient technologies; an energy-efficient HVAC system; a carbon-dioxide monitoring system to help provide adequate ventilation; and renewable energy provided by the campus central plant. The project has earned a LEED gold certification and is anticipated to save 43 percent more energy than ASHRAE standards.

The building is sited on a major north-south student thoroughfare. As a result, it is designed with a major entrance on the north and south facades, so students can circulate through the building as they move from one end of campus to the other. This "neutral" path through the building provides views of multiple recreation activities, enticing students to the center without having to enter the "controlled" recreation area.











Virginia Commonwealth University, School of Business and School of Engineering · *Richmond, Virginia*



Moseley Architects, PC

Associated firms:
Payette Associates; RMJM Hillier; Smith McClane Architects

Design team:
George Nasis, AIA, Managing Principal; John Hasten Jr., AIA, Project Manager; Patrick Ramirez, Project Architect; Robert Baxter, AIA, Construction Administration

Client:
Virginia Commonwealth University; John Bogan, Senior Systems Designer

Capacity: 5,669	**Area:** 260,000 sq. ft.
Total cost: $65,699,287	**Cost/square foot:** $252.69
Completion: August 2007	**Photographer:** Maylone Photography

Virginia Commonwealth University wanted to create a new School of Business and School of Engineering that would be integrated within a unified complex. The building would be designed to facilitate interdisciplinary collaboration between the two schools and become a "gateway" into this part of the campus.

This academic building houses both the School of Business and the School of Engineering. The 129,379-square-foot School of Business includes classrooms, research laboratories, case-study rooms, lecture halls, multimedia teaching facilities, a trading room, cafe, faculty offices, administrative offices and related support space. The 114,655-square-foot School of Engineering, the second phase of the engineering complex, includes digital and information technology laboratories, with an emphasis on research labs. The facility is in the university's new East Monroe Park Campus, which is surrounded by some of the city's most prominent historical attractions. As such, the exterior of the facility needed to provide a contextually appropriate response in order to blend comfortably with the existing architectural fabric of the city.

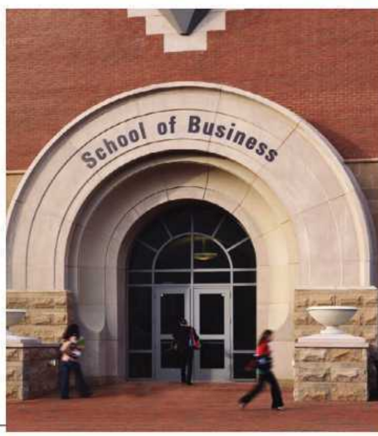
A unique opportunity in this project was the idea that two schools would share the same roof. The university wanted this facility to foster collaboration between the two schools and enable engineering students to share innovative research advancements with business-minded entrepreneurs, much as they would in a real-world workplace.

Another challenge was designing a new collegiate building as a cohesive part of the historic Monroe Ward in Richmond. Victorian-style architecture was incorporated into the facility's facade, contextually blending the new building with the historical fabric of the capital city.













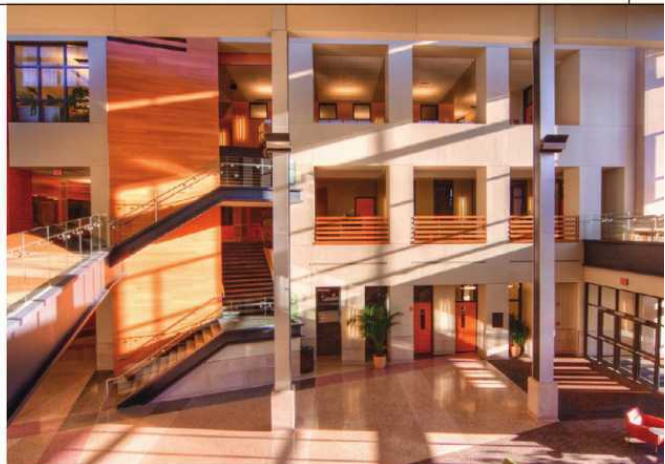






Ball State University, David Letterman Communication and Media Building · *Muncie, Indiana*







Ball State University's David Letterman Communication and Media Building is the new entrance to a multi-building complex that expands and elevates the award-winning telecommunication programs at the university. It supports three outstanding departments: communication study, journalism and telecommunications. The 89,000-square-foot building also houses the Center for Information and Communication Sciences and the Center for Media Design, which has achieved a national reputation for communication research.

Named for David Letterman, the university's most prominent graduate and host of "The Late Show with David Letterman," the environmentally conscious building provides academic classrooms, technology-rich studios, edit suites and office/administrative spaces. With digital-screening rooms that rival Hollywood's best, the Letterman Building provides a premier communications educational experience.

The dramatic central atrium, which is aligned perfectly on an east-west axis with the Shafer Bell Tower, runs the entire length of the building. In addition to providing the main circulation path and formal entry point, this large, light-filled space allows natural light to penetrate deep into the heart of the building. The lobby and atrium allow students to navigate all levels of the multi-building complex easily.





MSKTD & Associates, Inc.

Design team:
Gary E. Voirol, Architect/Principal; Rod Collier, Design Architect; Susan Parrish, Interior Designer; Jim Kelley, PE, Mechanical Engineer; Jon Rowe, PE, Electrical Engineer; Kerry Schoeph, Civil Engineer; Ken Hess, Structural Engineer

Client:
Ball State University; JoAnn Gora, President

Area: 89,000 sq. ft.	**Total cost:** $16.5 million
Cost/square foot: $185	**Completion:** September 2007

Photographer:
Jonah Garoutte/MSKTD

University of San Diego, Missions Student Housing and Cafe/Fitness Center · *San Diego, California*



MVE Institutional, Inc.

Design team:
Robert Simons, AIA, Partner-in-Charge; Mel Tan, AIA, Project Designer; William Koster, AIA, NCARB, LEED AP, Director of Technical Services; Gary Penman, Project Architect

Client:
University of San Diego; Roger Manion, Assistant Vice President, Facilities Management

Capacity:
258 beds

Area:
93,000 sq. ft.

Total cost:
$18.6 million

Cost/square foot:
$200

Completion:
July 2007

Photographer:
Christopher Costea





The Missions Student Housing project is situated along the northern slope of the University of San Diego, overlooking Mission Bay in San Diego and surrounded by mature trees and lush landscaping. The new building blends seamlessly with the Spanish Renaissance Revival architectural style, for which the campus is known. The project provides 72 apartment-style units in one-bedroom/one-bath, two-bedroom/two-bath and four-bedroom/two-bath configurations. A living room, dining area and full kitchen are included in each floor plan. The four-story building is built on an existing site that replaced older, lower-density student apartment buildings.

Missions Student Housing is served by three elevators and provides a complete amenity package, including a laundry room, four student lounges, conferencing facilities and housing-specific storage rooms. The building is designed so that four new courtyards are created around the building, each one serving multiple student activities. The largest courtyard serves as a pedestrian link and outdoor sitting area for a wholesome student cafe and an instructional fitness center, situated adjacent to the housing. The smaller courtyards offer students the opportunity to take advantage of the mild climate as they experience the total learning environment fostered by the University of San Diego.

First floor



LEGEND
1. Lounge
2. Housing above
3. Storage below housing
4. Storage
5. Fitness center
6. Cafe
7. Lobby
8. Conference center
9. Plaza
10. Proposed student housing building: three to four stories
11. Proposed fitness center: one story



San Jose State University, Campus Village

San Jose, California













Niles Bolton Associates

Design team:
Niles Bolton, Ray Kimsey, Jeff Smith, Ed Palmer

Client:
San Jose State University; Alan Freeman, Director of Planning, Design and Construction

Area:
2.4 million sq. ft.

Total cost:
$161,937,378

Cost/square foot:
$67.47

Completion:
October 2005

Photographer:
Michael O'Callahan

Campus Village opened in fall 2005 for students at San Jose State University. The village consists of three multi-family residential buildings, a village market, recreation center and two stories of underground parking.

Campus Village is on the southeast corner of the San Jose State University campus, a short walking distance to most classes and to downtown San Jose. It has three residential buildings, which consist of 4,600 student beds, 400 faculty and staff beds, an 11,000-square-foot retail space and 15,000-square-foot dining space.

The water table in San Jose, Calif. is high—only 6 feet under grade. The project's tight site mandated underground parking, which reached down 22 feet. Dewatering shafts were drilled every 20 feet around the entire city-block site, and the contractor ran pumps 24-7. At first, a mud slab was poured to get construction out of the mud and to create a flat, dry surface. Then, a waterproofing layer was added and ultimately, an actual mat-slab. Concrete was poured continually for three days. Pumps could be turned off only after the pouring of the project's third level. If the pumps had been turned off earlier, there would not have been enough weight in the structure to keep it from floating up, given the extent of the water pressure.

Victor Valley College, Advanced Technology Building
Victorville, California



NTD Architecture
Design team: Jay Tittle, AIA, Principal; James Spencer, AIA, Design Principal; Shoji Takeshima, Project Architect; Jon Zuber, Construction Administration
Client: Victor Valley Community College District; Steve Garcia, Director of Facilities Construction and Contracts
Area: 48,641 sq. ft.
Total cost: $15,485,300
Cost/square foot: $318.36
Completion: April 2008
Photographer: Anthony O'Keefe



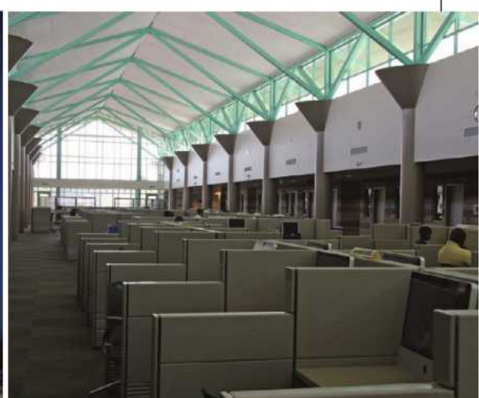
Victor Valley College's new technology building was developed to support the college's mission of inspiring innovative teaching and service. Imaginative uses of collaboration and technology foster vibrant programs that effectively address student learning and community needs.

The technology building is centralized to reduce the cost of having individual computer facilities for each program. It now is the hub of computer-related training activities on the Victor Valley campus. The new technology building gives students the opportunity to access the Web, process documents, design buildings, create animated movies and learn basic computer skills.

This high-tech center houses 20 multipurpose computer laboratories and is equipped with state-of-the-art, smart-classroom technology, allowing for instruction in a variety of disciplines. The computer mall, which spans the length of the building, allows for individual group instruction and is equipped with laptop docking stations with wireless service for students who have their own computers.







Rutgers University, Life Sciences Center

Newark, New Jersey



NK Architects

Design team:
Raymond Nadaskay, AIA, Principal-in-Charge; Paul Drago, AIA, Project Manager; Lawrence Gawloski, AIA, Design Architect; Daniel Topping, AIA, LEED AP, Project Architect; David Kimzey, Interior Designer; Mark von Bradsky, Principal-in-Charge, Structural Engineer; AKF Engineers, MEP Engineer

Client:
Rutgers University/Newark Campus; Gene A. Vincenti, MBA, Executive Vice Chancellor for Administration

Area:
67,740 sq. ft.

Total cost:
$19,578,986

Cost/square foot:
$289

Completion:
May 2006

Photographer:
George Shagawat





This urban Life Sciences Center anchors a prominent corner on the Rutgers Newark, N.J., campus and creates a hub to integrate the chemistry, biology and neuroscience programs into one facility. The building acts as both a physical and metaphorical bridge, or link, among the programs, providing an "incubator" for interdisciplinary interaction. Additional goals for the project:

•Encourage interdisciplinary research.

•Attract new programs and allow for expansion of existing life-sciences programs.

•Provide flexibility to accommodate future programmatic changes.

•Act as a "gateway" project for the campus and provide a welcoming presence to the community.

•Act as a catalyst in recruiting top researchers to the university.

The campus of Rutgers-Newark has experienced dramatic growth, paralleling the growth of Newark itself. Today, the campus comprises 25 buildings spread over 35 acres. Continuing development of joint programs with surrounding universities creates, in essence, a campus whose boundaries extend beyond the physical constraints of Rutgers-Newark and underscore the need for the campus to turn outward and physically embrace the surrounding community.

This research facility must address the diverse needs of numerous user groups and be flexible in its design. To maximize flexibility, two lab planning concepts were incorporated: a standard lab module and an open-plan concept. The standard lab module is 10 feet, 6 inches wide by about 30 feet long and may consist of up to six modules. It is used as a building block to configure labs.

Each module contains two wet bench stations of 8 to 10 feet long, two tech desk stations of about 4 feet long, and an equipment alcove of 10 feet by 10 feet.

The open-plan concept facilitates the reassignment and reconfiguration of lab space, with little or no modifications and down time. The open lab-planning concept offers the additional advantage of encouraging interaction among researchers. By removing most physical barriers among researchers, the open lab plan greatly increases the frequency of "incidental" interaction among researchers and information sharing.







"Working with the architect on designing and building the new science building project was a pleasure. The architect worked with our researchers to develop a sound program for the building and continued to develop a very workable design for the university. The end result is a state-of-the-art research and teaching building with the latest technologies for students and staff."

—Marty Ryan, Associate Vice Chancellor for Facilities







Austin Community College, Cypress Creek Campus Expansion

Cedar Park, Texas











To meet the demands of the community and regional workforce, this new classroom building combines with a comprehensive renovation of the 16-year-old original campus building to provide 42 more classes at Cypress Creek. A key objective was to redefine the main entrance to the campus, and create a high-quality and energized collegiate campus. Courtyard landscaping provides exterior spaces to support academic and extracurricular activities.

The campus, which serves as a regional site for ACC's nursing program, now includes a 10-bed nursing lab, an EMS training room and six new science labs. This focus is part of a regional effort to support a shortage of healthcare workers throughout Texas. A comprehensive interior renovation of the original 37,000-square-foot building updates classrooms and provides a new exterior facade for the facility.

Additional classrooms, computer labs, administration and faculty offices, and student services support the project's goal to provide comprehensive student services. The project meets the demands of this growing community by increasing student capacity 50 percent, and creates a contemporary look for the campus.

O'Connell Robertson

Associated firm: CasaBella Architects

Design team:
O'Connell Robertson, Architecture, MEP Engineering, Construction Administration; CasaBella Architects, Architecture; Laura Britt Design, Interior Design; Coleman & Associates, Landscape Architecture; Spawglass Contractors, Inc., Construction Management; Jaster-Quintanilla & Associates, Structural Engineer; Jose Guerra Inc., Civil Engineer; DataCom Design Group, Technology; Busby & Associates, Cost Estimating

Client:
Austin Community College; Linda Haywood, Campus Manager

Area:
65,000 sq. ft. (new); 37,150 sq. ft. (renovation)

Total cost:
$14,161,000

Cost/square foot:
$138.62

Completion:
December 2006 (new); June 2007 (renovation)

Photographers:
Mike Osborne Photography; O'Connell Robertson

Manhattanville College, Student Center
Purchase, New York



Peter Gisolfi Associates Architects • Landscape Architects • Interior Architects

Design team:
Peter Gisolfi, AIA, ASLA; Michael Tribe, AIA, LEED AP; Klaus Kalmbach, RA; Michelle Benitez-Oritz; Carolina Martinez, Patricia Montero, Joori Suh

Client:
Manhattanville College; Richard A. Berman, President

Area:
34,800 sq. ft.

Total cost:
$10.8 million

Cost/square foot:
$310

Completion:
April 2008

Photographers:
Robert Mintzes; Chris Wadsworth; ArcXchange (rendering)



Rendering



The Student Center at Manhattanville College in Purchase, N.Y., forms a gateway to the campus and the eastern edge of a new quadrangle. From the ground-floor entry, a strong diagonal axis pulls visitors toward a ceremonial stair that leads to the quadrangle level and focuses on the view to the tower of historic Reid Castle. The diagonal stair penetrates the west wall of the building in a glass cube, which allows daylight to illuminate the ground floor.

The center supports interdisciplinary activity, with spaces for performing arts, creative arts, student clubs, dance and fitness. The main-floor art gallery and student lounge, an extension of the quad, are flooded with natural light. Most public spaces have views to the new quadrangle and the heart of the campus. The building is permeable so that students participating in a variety of activities can see and be seen.

The student center has been awarded LEED gold certification. Solar collectors generate 13 percent of the building's electricity. The building requires only 48 percent of the total energy needed by a conventional building of the same size.





University of Arkansas—Fayetteville, J.B. Hunt Transport Services Center for Academic Excellence · *Fayetteville, Arkansas*



Perry Dean Rogers | Partners Architects

Associated firm: Wittenberg Delony & Davidson, Architect of Record	
Design team: Ned Collier, AIA, Principal-in-Charge	
Client: University of Arkansas; W. Fredrick Limp, Director, Center for Academic Excellence	
Area: 120,000 sq. ft.	**Total cost:** $23 million
Cost/square foot: $192	**Completion:** July 2007
Photographer: Timothy Hursley	

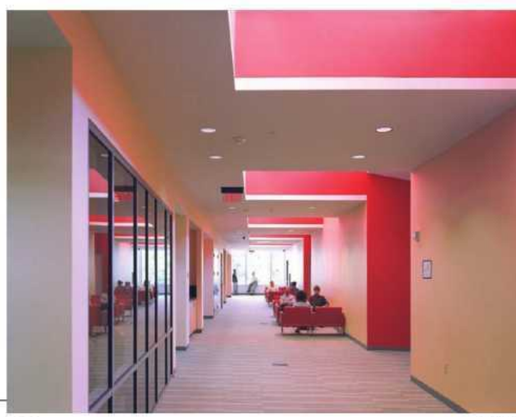
The J.B. Hunt Transport Services Center for Academic Excellence is part of the University of Arkansas at Fayetteville's McIlroy Hill Precinct development. The precinct design team, consisting of two architects and a landscape architect, planned the landscape and two of the three new buildings. The Hunt Center is the largest building and home to three colleges, including the Walton College of Business, the College of Arts and Sciences, and the College of Engineering.

The center serves as a focal point and enabling infrastructure for information technology; computational science and engineering; and technology-enabled education, research and outreach. Faculty and staff, spanning the disciplines of business, engineering, and arts and sciences, prepare students for the diverse, innovative, collaborative, team-oriented environment prevalent in today's workplace. The center serves as a bridge, literally and intellectually, connecting students, faculty and staff of these disciplines.

Building materials include brick, metal panel and cultured stone on the exterior; interior walls of painted gypsum board and wood panel; and floors with carpet over removable access floor and porcelain tile. The building's raised-floor "displacement" air system requires a smaller mechanical system and has inherent flexibility.

The architectural problem is defined in large part by the ambitious multi-disciplinary program and the topography of the sloping site. The program combines components of three colleges and general university classroom spaces in a spirit of collaboration and cross-disciplinary research and teaching. This is evident most clearly at the main floor, where all building constituents are represented, sharing in research, teaching, a cafe, and collaborative and lounge spaces. The topographic condition requires the building to address four distinct approaches to the site—all at notably different elevations. How well these internal programmatic forces meet the external topographic forces is critical to the success of the project.













"The architect managed a multi-college, multi-departmental design development process. These departments were from the colleges of engineering, arts and sciences, and business. In the design development process, the architect deftly managed the differing cultures and perceptions, and elicited the requirements that led to an extraordinary collaborative research and educational environment."

—W. Fredrick Limp, Director, Center for Advanced Spatial Technologies

Rhode Island College, New Residence Hall
Providence, Rhode Island



RGB Design Studios

Design team: David L. DeQuattro, AIA, Principal; Steven L. Hughes, AIA, LEED AP, Project Manager; Andrew Barkley, Associate AIA, LEED AP, Job Captain; Kathryn Mancini, ASID, Interior Design; Building Engineering Resources, Electrical; Wilkinson Associates, Mechanical; Odeh Engineering, Structural; RGB, Civil/Plumbing/Fire Protection	
Client: Rhode Island College and the State of Rhode Island; Nancy Carriuolo, President	
Capacity: 367 beds	**Space/student:** 347 sq. ft.
Area: 127,500 sq. ft.	**Total cost:** $28.7 million
Cost/square foot: $225	**Completion:** August 2007
Photographer: Bradley Jones	

The program for the new 367-bed facility at Rhode Island College included residential life, office space, common student studies, a student lounge and recreation room. The design was based on a mix of two-bedroom shared and four-bedroom private apartment-style and suite units. The project was designed to be the first LEED-certified residence hall in Rhode Island.

The sloping nature of the site allowed for five stories to be built starting from the main entrance road elevation, with a partial lower level terraced into the hillside. The design approach allowed additional space on the lower level for residential life and housing offices, while minimizing the height of the building relative to its context. The use of similar-colored brick ties into the surrounding buildings.

Block and plank-type construction provide a durable wall and ceiling finish, as well as structural system, which minimized additional finish materials.

To promote better indoor air quality, low-VOC materials and a high-efficiency HVAC system provide continuous conditioned air to each unit. Minimal use of carpeting and VCT also reduce maintenance costs. Upper floors use composite acoustical gypsum and a Portland cement-based surface topping system to minimize noise transmission between floors.

An Energy Star white roof and high-efficiency glazing help minimize energy costs, and continuous air/vapor barriers minimize heat loss. Energy-efficient strategies are predicted to save more than $116,000 per year in utility costs.

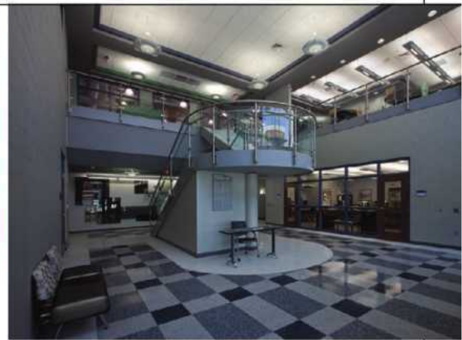


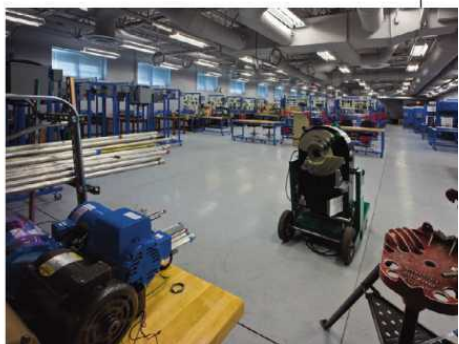




Owensboro Community & Technical College, Advanced Technology Center · *Owensboro, Kentucky*









RossTarrant Architects, Inc.

Design team:
Jeffrey C. Stivers, AIA, Principal-in-Charge; Randy Brookshire, AIA, LEED AP, Project Manager; Martha Tarrant, AIA, Programming Specialist; Laith M. Ross, PE, Civil Engineer; Dan G. Colvin, IIDA, CID, Senior Interior Designer

Client:
Owensboro Community & Technical College; Paula M. Gastenveld, President

Area: 60,000 sq. ft.	**Total cost:** $9,859,120
Cost/square foot: $164	**Completion:** October 2007

Photographer:
Moberly Photography, Inc.



Inspired by rapid industrial growth in western Kentucky, Owensboro Community & Technical College developed the state-of-the-art Advanced Technology Center. The facility is designed to support programs that enable regional students to attain the education and training necessary to succeed in the increasingly specialized local job market.

To support the professional development of the local workforce, the Advanced Technology Center offers a wide range of educational programs. Technology-focused programs include information technology, telecommunications, automated manufacturing technology, integrated automation and computer-aided design. In addition, the facility supports courses in electricity and electronics, electrical maintenance, fluid power and pneumatics, biotechnology and a variety of other specialized industries.

Beyond its classroom spaces, the Advanced Technology Center offers a large multipurpose meeting room and seminar spaces. Faculty offices, the registrar's office, a student lounge and art gallery also are included in the building.

Designed with flexibility in mind, the facility can adapt to the evolving needs of the community and the rapidly changing technologies of the region.

University of California—Irvine, Anteater Recreation Center (ARC) Expansion · *Irvine, California*





Robbins Jorgensen Christopher Architects (RJC)

Associated firm: Langdon Wilson

Design team:
RBF, Civil; SMR-ISD, Structural; MA, Mechanical; ILA, Electrical; Alpha, Fire Protection; Soltek Pacific, Contractor

Client:
University of California—Irvine;
Rebekah Gladson, Associate Vice Chancellor, Campus Architect

Area:
20,000 sq. ft.

Total cost:
$12,095,300

Cost/square foot:
$604.77

Completion:
July 2008

Photographer:
Nick Merrick

The University of California—Irvine (UCI) needed to expand its Anteater Recreation Center (ARC) because of increasing demand for recreational facilities and space shortages that severely limited class offerings.

The ARC expansion provides 20,000 more assignable square feet for a weightroom, and classrooms for dance and martial arts. It also includes a contemporary fitness/wellness center, physical-therapy rooms, a body-composition system to measure body fat, and cutting-edge technology for cardiovascular and metabolic analysis.

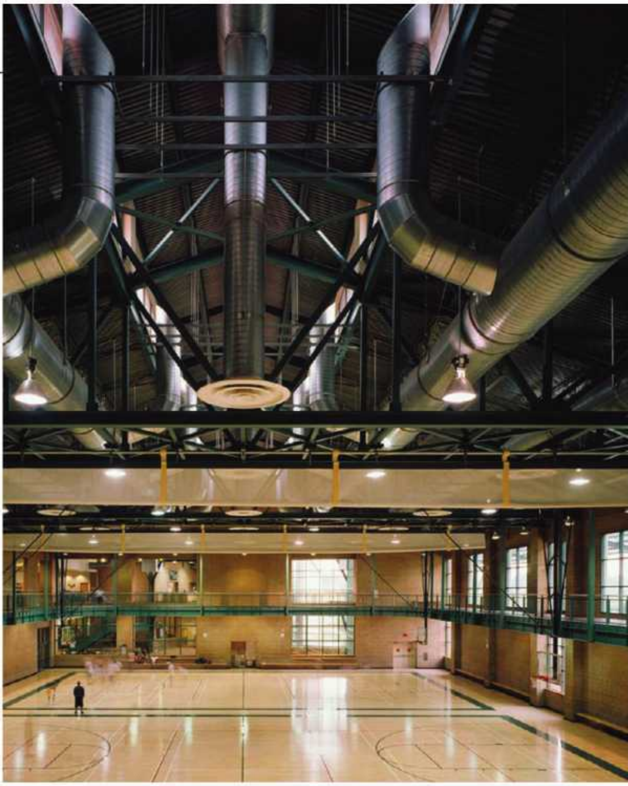
The campus architect took selected students on a nationwide "best practices" tour of recreational facilities. The team decided that signage should not be required to navigate the new center; the center should reflect the agrarian roots of the campus; and it should be a place to "hang out."

The design team wanted this building to echo the style of the original California Irvine Ranch—the land where UCI was built.

The only recreational facility on campus, ARC had become the focal point for student life in the growing eastern sector of campus. Because housing there is far from the campus core, ARC had to create a welcoming "student center" feel.

Redefining agrarian for the 21st century, the design team created a modern "farm" building with steel trusses, pitched roofs, and split-face concrete block and glass. Classrooms have sprung floors and mirrored walls.

This project complied with UC policy for green building design through principles of energy efficiency and sustainability to exceed Title 24 energy requirements by 30.1 percent.













Indiana University-Purdue University Fort Wayne, John and Ruth Rhinehart Music Center · *Fort Wayne, Indiana*





SchenkelShultz Architecture

Design team: Richard Stump, AIA, Principal Architect/Certifying Architect of Record; Seth Buchanan, Conceptual 3-D Renderings; Shane Waggoner, CAD Designer/Production; Michael Walker, Construction Oversight; Kim Bowman, Specifications/Quality Control	
Client: Indiana University-Purdue University Fort Wayne; Walter Branson, Vice Chancellor for Financial Affairs	
Capacity: 465 (students); 1,600 (auditorium)	**Area:** 112,541 sq. ft.
Total cost: $23,710,338	**Cost/square foot:** $210.68
Completion: September 2007	

The goals for the Rhinehart Music Center were to blend with the existing campus, fit into the school's master plan, and express a distinctive character.

The completed facility provides acoustically designed, collaborative learning spaces, and a 1,600-seat auditorium that serves as a lecture and concert hall. Choir and student-observation seating is provided behind and around the stage. Additional spaces include a 250-seat recital hall, classrooms, practice rooms, and offices for faculty and community organizations.

One challenge of the project was designing the acoustics of the auditorium either for lectures or music performances, with reflective, diffusive and adjustable absorptive surfaces, and amplified sound. Another challenge was maintaining a "sacred" grove of trees within the triangular-shaped site.

The exterior design reflects the program inside with large, angled glass windows that break up brick accent banding, symbolizing sheet music. The conservative east elevation blends with the existing campus, while the energetic west elevation complements the arts complex.

The design creates an inviting place for students and the public.





University of Wisconsin—Stevens Point, Dreyfus University Center Addition and Remodeling · *Stevens Point, Wisconsin*



SDS Architects, Inc.

Associated firm: Perkins+Will

Design team:
SDS: Tom Twohig, AIA, Principal-in-Charge/Project Architect; Perkins+Will: Jeff Ziebarth, AIA, LEED AP, Planning & Design Principal; Jeff Stebar, AIA, LEED AP, Student Union Programmer; Paul Neuhaus, AIA, LEED AP, Project Designer

Client:
State of Wisconsin—Division of State Facilities; University of Wisconsin—Stevens Point; Susan Crotteau, Assistant Director, University Center

Capacity: 3,500	**Space/student:** 52 sq. ft.
Area: 184,000 sq. ft.	**Total cost:** $21.4 million
Cost/square foot: $116	**Completion:** November 2007

Photographers:
Perkins+Will; Hedrich-Blessing





Named for Lee Sherman Dreyfus, former University of Wisconsin—Stevens Point chancellor and 40th governor of Wisconsin, the Dreyfus University Center project expanded and renovated a building constructed 50 years ago. The project's objective was to add spaces and services to the building while improving wayfinding throughout. The 34,000-square-foot addition provides an expanded entry and new front facade. The 150,000-square-foot remodel included the kitchen and dining areas, bookstore, ballroom and lounge spaces, and replacement of antiquated HVAC, plumbing and electrical systems.

A two-story daylighted concourse was added with spaces for student services including the information center, cafe, copy shop, hair salon, Multicultural Resource Center and lounges. The building serves university students all day with activities generated by spaces such as the cafe, pizza venue and movie theater.

The new University Center is active year-round with community and regional programs, services and events. Although the project did not include the resources to participate in the LEED certification program, the design team incorporated strategies and engaged in a LEED-spirited process.





Schoolcraft College, Biomedical Technology Center
Livonia, Michigan



SHW Group LLP

Design team:	Janice Suchan, AIA, LEED AP, Principal-in-Charge; William Zaske, AIA, LEED AP, Project Manager; Jeff Sharpe, AIA, Principal Designer
Client:	Schoolcraft College; Jill O'Sullivan, Vice President/CFO
Area:	48,500 sq. ft.
Total cost:	$12.7 million
Cost/square foot:	$262
Completion:	April 2008
Photographer:	David E. Rose Photography

The Biomedical Technology Center (BTC) merges the mathematics and science programs of Schoolcraft College into a single facility. The technologically rich, interactive learning environment offers a variety of learning methods and styles. Spaces provide for individual study, random and informal learning, and interactive project and group work.

The heart of the center is the Learning Theater, a fully integrated, multimedia environment equipped with multiple projection, smart-board technology and integral classrooms. The Learning Theater provides the BTC with a flexible learning and community space—a town square.

The building is designed for flexibility, allowing for immediate reconfiguration. The design can be adapted as technology and teaching methods evolve. Technology and the built environment are seamless; wireless capability, plug-and-play monitors, projection, data capture and retrieval systems, and digital art allow for immediate use in a user-friendly environment. Classrooms are integrated for collaborative and project-based learning.

The building also houses a large faculty space designed to facilitate collaboration among faculty, staff and students.













Alliant International University, Walter Library and Marshall Goldsmith School of Management · *San Diego, California*







Before





Sillman Wright Architects

Design team: Larry Sillman, AIA; Tina Reagan, AIA; Alfred Wilson; Roberts & Bennett; The Engineering Partners, Inc.; DEC Engineers; Stedman & Dyson Structural Engineers	
Client: Alliant International University; Geoffrey Cox, President	
Area: 28,148 sq. ft.	**Total cost:** $2.2 million (excludes FF&E)
Cost/square foot: $78.16	**Completion:** April 2008

This adaptive reuse of an underused library building at Alliant International University provides five classrooms, an executive conference room, three multipurpose rooms, open study areas, and 26 administration and faculty offices on the lower level. The library services were consolidated to the upper level with a shared mezzanine.

Modernization included a new elevator, stair and restroom retrofitting, accessible parking for a new building entry, and upgrades to electrical and mechanical systems for accommodating more energy-efficient lighting, better thermal control, and new state-of-the-art technologies.

Faculty, staff and students required a flexible environment with a relaxed atmosphere offering casual seating to encourage breakout sessions for spontaneous learning opportunities. The collaborative design process included 3-D models that demonstrated flexibility in the space. Finishes and furnishings were selected meticulously during multiple design charettes so that all stakeholders had pride of authorship for the building.

The post-occupancy responses have been positive, and students, faculty and staff are excited to be a part of this newly renovated facility.

Elon University, The Colonnades Dining Hall
Elon, North Carolina



Spillman Farmer Architects

Associated firm: Mesher Shing

Design team:
Daniel L. Harrigan, AIA, Principal-in-Charge; Thomas K. Woods, AIA, Project Architect; Henry J. Delvecchio Jr., IIDA, Interior Designer; David S. Wrigley, CSI, CDT, Construction Specifier

Client:
Elon University; Leo Lambert, President

Capacity:
350

Area:
24,000 sq. ft.

Total cost:
$6.7 million

Cost/square foot:
$279

Completion:
August 2007

Photographer:
Greg Loflin









Elon University's Colonnades Dining Hall is a complete departure from a typical dining hall or food court and sets a new standard in campus dining.

The Colonnades is a two-story, 24,000-square-foot dining facility that offers a variety of unique dining choices. The first floor of the building features The Fountain Market, a grocery mart where organic and locally grown products are sold. Within the market are the deli and fresh-tossed salad venues. Also on this level are the food-service provider's campus offices and the central cooking kitchen.

A grand staircase leads visitors to the upper floor with four separate dining venues: a full-service restaurant serving steaks and seafood; a brick-oven pizza venue for Italian-style fare; a soup and sandwich shop; and an international venue with food prepared on a Mongolian grill.

Connected by a central arcade, each venue boasts a distinct identity and unique ambience. An outdoor terrace overlooks the campus for open-air dining during the warmer months of the year.



Lasell College, Rockwell Residence Hall
Newton, Massachusetts









Steffian Bradley Architects

Design team: John Pears, RIBA, Project Executive; Alicia Caritano, AIA, Principal-in-Charge; John Christenson, AIA, Project Manager; Jana Silsby, AIA; Craig DiCarlo; Antonio de-la-Carrera; Enrique Rojas, IALD, IES, Lighting Designer		
Client: Lasell College; Thomas Koerber, Director of Public Safety and Plant Operations		
Capacity: 148 beds	**Space/student:** 238 sq. ft.	**Area:** 35,275 sq. ft.
Total cost: $7,760,000 (construction)	**Cost/square foot:** $220	**Completion:** July 2007
Photographer: Robert Benson Photography		

Rockwell Residence Hall provides Lasell College with much-needed additional housing for its growing undergraduate population. Situated against a backdrop of natural vegetation abutting a historic Victorian neighborhood and adjacent to an existing athletics field, Rockwell responds to the distinct needs of students, faculty, visitors and neighbors.

Students find a welcoming home in this efficient, sustainable and durable building, with comfortable bedrooms and open lounges overlooking the fields through floor-to-ceiling curtainwall windows. Faculty and administrators access the rooftop terrace to enjoy bird's-eye views of the games. The design team worked collaboratively with neighborhood and historical groups, resulting in a smooth and efficient approval process.

The complex site determined Rockwell's lengthy horizontal massing, but the design team turned challenges into aesthetic and functional solutions. A playful variety of exterior finishes and details articulates a dynamic facade that reflects the architectural language of the college and its surrounding neighborhood. Curtainwalls and operable windows maximize natural lighting and ventilation; overhangs and glazing reduce solar gain to minimize energy needs. Exterior landscaping and natural greenery limit views of the building from outside the campus, ensuring maximum privacy for students and Lasell's residential neighbors.

Montgomery County Community College, Advanced Technology Center · *Blue Bell, Pennsylvania*



STV
Design team: Stuart Rothenberger, Project Executive; Gary Shane, Lead Architect; Lori Burnley, Interior Design
Client: Montgomery County Community College, Advanced Technology Center; Karen Stout, President
Area: 62,300 sq. ft.
Total cost: $15.2 million
Cost/square foot: $244
Completion: July 2007
Photographer: Halkin Architectural Photography

To accommodate the fast-paced technical needs of its growing student population, Montgomery County Community College (MCCC) commissioned the architect to design its Advanced Technology Center (ATC). Situated in Blue Bell, Pa., the new 62,300-square-foot structure includes high-speed, wireless Internet access throughout the building. The new facility provides much-needed space for five divisions of the college, including math/science/advanced technologies, business/computer science and communications. The ATC provides a collaborative learning environment where the humanities and the sciences are brought together to promote an interdisciplinary approach to education.

The design of the ATC integrates advanced technology with dramatic architecture for a modern lounge/academic environment. The showcase element of the building is the dynamic three-story atrium that serves as both an entryway and cafe. It also features a video wall and a "cybertower" with integrated public-use computer stations on each floor. The facility is decorated in a rich combination of earth-toned brick, contrasting with the machine-like precision of smooth metal panels. Intense colors add to the visual excitement of the interior spaces.

Interior materials include extensive use of perforated, stainless-steel panels, stretched fabrics, glass and exposed mechanical system components.









Dixie State College of Utah, Russell C. Taylor Health Science Center · *St. George, Utah*









VCBO Architecture

Associated firm:
Ellenzweig Associates

Design team:
Peter Brunjes, AIA, LEED AP, Principal-in-Charge; Derek Payne, AIA, LEED AP, Project Architect; Celestia Carson, AIA, LEED AP, Project Manager

Client:
Dixie State College of Utah; Stephen Nadauld, President

Area:
78,000 sq. ft.

Total cost:
$15.1 million

Cost/square foot:
$193

Completion:
April 2008



Dixie State College was given the opportunity to develop a new health-sciences building on land that was donated by Intermountain Health Care on a parcel adjacent to its Dixie Regional Medical Center. Dixie State College will enjoy a close collaborative working relationship with the hospital because of its proximity and complementary programs.

This three-story, mixed-use facility will contain several departments for the health sciences, including administration, nursing, medical radiology, respiratory therapy, dental sciences, surgical technology and physical therapy. It also will contain academic shared space; a 150-person lecture hall; 60-person lecture hall; and student lounges. The entry lobby, which is open to the second level, and a student lounge area with an attached communicating stair serve to link all three levels vertically. The stair and lobby elements serve as a beacon and gain spectacular views to the south and west. The facility also will be used for conferences, seminars and lectures.

The integration of usable outdoor space into the facility was critical because the St. George climate will facilitate its use. A winter/entry courtyard to the sunny south and a summer courtyard on the shaded north have been added to the design to offer a variety of student gathering spaces within the site.

Ursinus College, New Residence Hall
Collegeville, Pennsylvania



Wallace Roberts & Todd, LLC

Design team:
Gilbert A. Rosenthal, Principal-in-Charge; Joseph J. Salerno, Project Director; Henry Fey, Project Architect; Ken Gignac, Landscape Architect

Client:
Ursinus College; John Strassburger, President

Capacity:
187

Space/student:
310 sq. ft.

Area:
57,970 sq. ft.

Total cost:
$10.4 million

Cost/square foot:
$179.40

Completion:
August 2007

Photographer:
Jeffrey Totaro









This new residence hall is adjacent to Ursinus College's academic core. It is the second element in a phased master plan to develop a 650-person residential village for this highly ranked liberal-arts school.

The college, in striving to foster personalized learning relationships among students, faculty, staff and the greater community, has long housed students in an eclectic mix of turn-of-the-century homes that line the Main Street of its small-town setting. To capture similar residential qualities, the design of the new building fractures the 187-bed program into smaller "neighborhoods" of about 20 residents, each with dedicated study and other shared facilities. Pairs of neighborhoods then are knitted together at larger recreational lounges, which are open to the building's central circulation core. The building also includes an apartment for a faculty adviser in residence, and spaces intended to draw seminar-type teaching out of traditional classroom settings and into the more relaxed environment of the residential village.

On the building's exterior, bump-out elements are expressed as a series of townhouse facades, which will frame courtyards as future phases of the village are developed.

Erma Byrd Center for Public Higher Education
Beaver, West Virginia









ZMM Architects & Engineers

Design team:
Brian A. Estep, AIA, Project Architect/Project Manager; Robert Doeffinger, PE, Project Engineer; Joanne Stafford, IIDA, Interior Designer; Alana Pulay, IIDA, LEED AP, Interior Designer

Client:
Forward Southern West Virginia; Thomas S. Acker, S.J., Executive Director

Area:
33,000 sq. ft.

Total cost:
$7.5 million

Cost/square foot:
$227

Completion:
August 2007

Photographer:
Ferrell Photographics

The Erma Byrd Center for Public Higher Education in Beaver, W. Va., is the first building of its kind in the state. The center provides students the convenience of taking college classes offered by six different colleges and universities in a single location.

Through technology, the building itself becomes an educational tool. Students are able to monitor the building's systems and controls through Web-based software, learning how the system functions, and how climate and building design affect performance. A wind turbine and photovoltaic panels on site assist in reducing overall utility costs. Students see firsthand the benefits of using an alternative energy source.

The higher-education facility sets a new standard for the learning environment and energy efficiency. The building is designed to maximize natural light and has sensors throughout that control the artificial light level by measuring the light that is present in the space.

The Erma Byrd Center is a high-tech facility and the first building on what will become a complete campus for public higher education.

SPECIALIZED FACILITY

CITATIONS

Davis Architects
Alabama 4-H Center, Environmental Education Building
Columbiana, Alabama .... p. 223

"We like the use of native and recycled materials. Nice large meeting spaces and views. Excellent use of rainwater."

—2008 Jury



JCJ Architecture
Regional Center for the Arts
Trumbull, Connecticut .... p. 224

"Nice focus on arts and learning. Great site context of residential sensitivity on one side and very public performance and prefunction area on the other."

—2008 Jury



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OUTSTANDING SPECIALIZED FACILITIES

OUTSTANDING SPECIALIZED FACILITIES



p.244

Alabama 4-H Center, Environmental Education Building
Columbiana, Alabama



Davis Architects

Design team:
Neil E. Davis, Project Designer; Geoff Clever, Principal-in-Charge; Don Cosper, Project Manager; Tracye Wynn, Project Coordinator; Whitney Tingle, Project Interior Designer

Client:
Alabama 4-H Club Foundation; Cody Lamar Nichols, Assistant Director, CES 4-H Administrative

Area:
17,480 sq. ft.

Total cost:
$5,248,460

Cost/square foot:
$300

Completion:
November 2007

Photographers:
Rion Rizzo; Karim Shamshi-Basha



"We like the use of native and recycled materials. Nice large meeting spaces and views. Excellent use of rainwater."
—2008 Jury





Alabama 4-H, an organization that aims to develop character and knowledge in young people, operates a training and conference facility on Lay Lake.

It wanted to develop a new environmental education and conference center, which by its design, construction and operation, would result in a minimal draw on non-renewable resources and give high priority to preserving the environment. The result is a building that is responsive to the surrounding woods, and incorporates natural and recycled materials inside and out.

Two laboratory classrooms support the 4-H Center's Environmental Field School, with a shared lab-preparatory area. Both laboratories have access to the outdoors for groups of students and visitors who participate in one- to three-day training sessions. Staff offices, a conference room and an infirmary on the lower floor support the environmental-education functions. The conference facility on the upper level accommodates 300 to 400 people in a large-function area with catering facilities and three flexible seminar rooms. The upper lobby serves as a prefunction space for the conference facility, and the lower lobby with a display area accommodates the busloads of visitors.

The unique "stargazer" deck provides a view of the night sky and a treetop view of nature. The metal roof allows rainwater to be collected, filtered and stored in a tank for fire-protection needs and for flushing toilets. Daylight features were incorporated throughout, as well as the use of recycled and renewable materials. The 17,480-square-foot facility is designed to receive LEED gold certification.

Regional Center for the Arts
Trumbull, Connecticut









JCJ Architecture

Associated firms:
Ameche Architects, Associate Architect; CCR/Pyramid, Inc., Educational Technology/Design; Consulting Engineering Services, Inc., MEP/Fire-Protection Engineer; Frederick P. Clark Associates, Inc., Traffic Engineer; Jaffee Holden Acoustics, Inc., Acoustical Engineer; Michael Horton & Associates, Structural Engineering; Stantec Consulting Services, Inc., Site/Civil Engineer, Landscape Architect; Robert D. Parker, Arts Programming; Fisher Dachs Associates, Theater Consultant; AFB Construction Management, Construction Manager

Design team:
James E. LaPosta Jr., AIA, LEED AP, Principal-in-Charge/Design Principal; Gregory J. Smolley, AIA, AICP, LEED AP, Project Manager; Peter Rader, AIA, Design Team Leader; Julie Norris, Interior Designer; Ronald N. Paolillo, Grace E. Fabian, John D. Hinchliffe, Azadeh Hadi-Andalib, Kryzsztof Trelski, Joseph M. Blowers, Dinu M. Patel, Designers

Client:
Cooperative Educational Services; Diane S. Wheeler, Principal

Capacity:	Space/student:	Area:
250	164 sq. ft.	41,000 sq. ft.
Total cost:	**Cost/square foot:**	**Completion:**
$10 million (budget)	$244	December 2007

Photographer:
Robert Benson Photography

"Nice focus on arts and learning. Great site context of residential sensitivity on one side, and a very public performance and prefunction area on the other."

—2008 Jury

Cooperative Educational Services' new Regional Center for the Arts opened its doors to 250 highly motivated high school students in January 2008. The architect developed programming, planning and design for this specialized, multi-district magnet high school.

New York Theatre Professionals teach dance, drama, musical theater and music education in individual learning areas designed to meet professional theater standards. In keeping with the school's open-door policy, all administrative offices, learning areas and public spaces are directly accessible to the informal, naturally lighted main lobby.

A 250-seat main theater and a studio theater, along with areas where students can improvise, rehearse and socialize, encourage and challenge students to explore the creative process.

Being a good neighbor was a prime consideration for the client. The architect responded to this challenge by limiting tree clearing and grading; designing the single-story structure in the same scale and pattern of the adjacent residential neighborhood; and orienting the main entry, dropoff, service and parking areas away from residential areas.

Forest Hills High School, Gymnasium Addition
Marshville, North Carolina



Adams Group Architects, PA

Design team:
Graham Adams, AIA; Brannon Everidge, Manoj Kesavan; Haas & Kennedy Engineers, Electrical Engineering Consultants; Stewart Engineering, Structural Engineering Consultants; Professional Engineering Associates, Mechanical Engineering Consultants; Davis-Martin-Powell, Civil Engineering Consultants

Client:
Union County Public Schools; Don Hughes, Director of Facilities, Planning and Construction

Capacity: 1,800

Area: 42,000 sq. ft.

Total cost: $6,700,091

Cost/square foot: $159.52

Completion: August 2007

Photographer: Chris Bradley











In order to accommodate its growing athletic program, Union County Public Schools decided to add an impressive new gymnasium to Forest Hills High School and renovate the adjacent areas. This 42,000-square-foot addition and renovation consisted of a main gymnasium, an auxiliary gymnasium, five offices, two health classrooms, a weight-training room, athletic training room, equipment rooms, locker rooms, public restrooms, a ticket office and concession area, as well as support spaces.

The challenge was to create a building that imparted a new identity to the school, and to create a new edge and image for the campus.

The solution was to plan the building so that the large-volume gym space faces the open playing fields; the smaller-scaled support spaces and the lobby face the existing buildings. The long, curved facade of the lobby strings together all the exterior spaces behind the older buildings into a defined courtyard. That area, along with the lobby, thus becomes a new focal point and gathering area for the entire campus. The carefully modulated elevations on the other sides present a new face to the sporting fields.

The character and identity of the school are expressed inside by using the colors, (golden yellow and black) and the striped pattern of the Yellow Jacket, the school's mascot. The theme is used in many variations: in the segmented ceilings of the lobby, the super-graphics inside the gym, and the color schemes in the classrooms and auxiliary spaces.

Immaculata University, Draper Walsh Stadium
Immaculata, Pennsylvania



Archer & Buchanan Architecture, Ltd.

Design team:
Southern Bleacher Construction Co.; Sports Plan Studio, Sports Consultant; G.H. Weaver, PE, Structural Engineer; HPE Group, MEP/Fire Protection Engineer; Jonathan Alderson Landscape Architects, Inc.; C. Raymond Davis & Sons, General Contractor

Client:
Immaculata University; Kerry Jones, Director of Capital Program Management

Capacity:
1,000

Area:
4,000 sq. ft. (building area); 1.5 acres (stadium)

Total cost:
$2.8 million

Cost/square foot:
$325 (building);
$1 million (grandstands/sitework)

Completion:
September 2006

Immaculata University is carrying out a 10-year campus expansion master plan to support its 2004 conversion to a co-ed institution. Development includes new and improved intercollegiate, intramural and recreational athletic venues.

The Draper Walsh Stadium project is the centerpiece of a larger West Campus Athletic District. It includes grandstand seating for 1,000, spectator amenities, team pavilions for home and visiting athletic teams, new walkways, walkway lighting, and landscaping to connect to the greater campus master plan. The design response to what typically are utilitarian public assembly buildings and accessory service structures was to compose and finish them efficiently, economically and modestly, but as a recognizable home for athletic programs.

The aesthetic "transitional modern" style with flat single-sloped roofs, protective overhanging eaves, simple geometries and clean lines define the building masses, and the rich textural and compositional vocabulary of the core campus buildings was a primary source of inspiration for guiding the development. One can see a clear hierarchy of these architectural elements: rusticated bases, smooth masonry upper walls, string courses, corresponding eave lines and the placement of windows in defined zones. Once spectators are seated, they are given a beautiful and scenic view back toward the iconic domes of the central campus' Villa Maria Hall and Chapel domes.

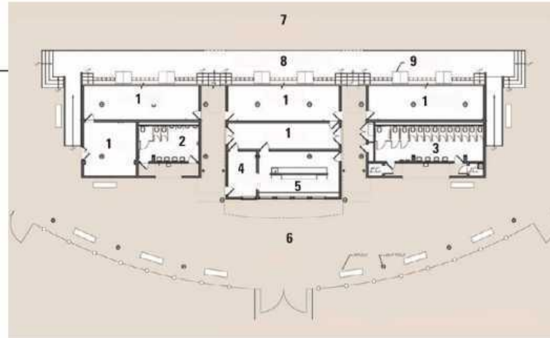
The stadium now provides a new visual focus and boundary to the western edge of the campus.







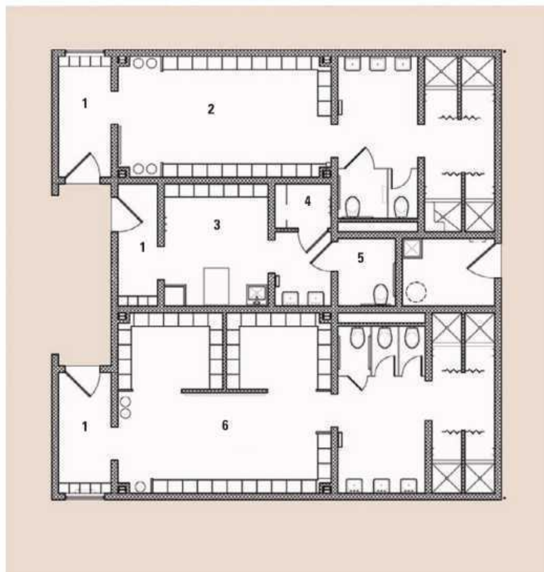




Ground level

LEGEND
1. Storage
2. Men's restroom
3. Women's restroom
4. First aid
5. Concession area
6. Stadium plaza
7. Playing field
8. Grandstand front aisle
9. Accessible seating

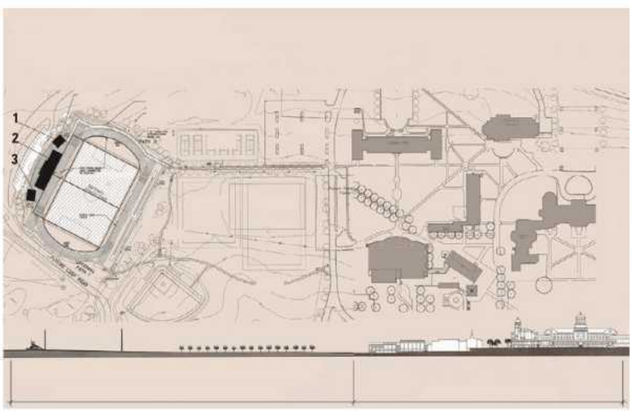




South pavilion

LEGEND
1. Vestibule
2. Small team room
3. Officials' room
4. Dressing area
5. Toilet
6. Large team room

LEGEND
1. North pavilion
2. Grandstand/Amenity building
3. South pavilion



Partial campus plan



Florida Gulf Coast University, Athletic Building
Fort Myers, Florida



Architecture, Inc.

Associated firm: Erickson Associates

Design team: Ted Sottong, AIA, LEED AP, Project Architect; Graef Anhalt Schloemer, Civil Engineer; TKW Consulting Engineers, Structural Engineer; JALRW Engineering Group, MEP Engineer; J. McGarvey Construction, Contractor	
Client: Florida Gulf Coast University; Wilson Bradshaw, President	
Area: 19,920 sq. ft.	**Total cost:** $3,830,000
Cost/square foot: $192	**Completion:** January 2008
Photographer: Donald Solins II/donleemanstudios Inc.	



This new athletic facility, set among the athletic fields at Florida Gulf Coast University, provides multiple services to the athletic department, student athletes and the university as a whole.

The design includes locker rooms with athlete lounges, trainer facilities and a concession area on the ground floor. The second floor has offices, a student-resources lab and a multipurpose room overlooking the university's baseball field. The multipurpose room makes use of floor-to-ceiling butt-glazing to provide an unobstructed view of the athletic complex.

The building's orientation, exterior concrete panels and fenestration directly reflect the varying characteristics of the interior functions. Using tilt-wall construction with interior steel framing provided an economic solution for the structure, yet allowed for creative solutions to interior space planning. The exterior materials are as much a part of the aesthetic as they are a solution to the unique requirements presented by the building's adjacent uses. Site planning and design address the long-term vision and preparation inherent to institutional design and master planning.









SPECIALIZED FACILITY

Webb School of Knoxville, Clayton Science Center
Knoxville, Tennessee



BarberMcMurry architects

Associated firm: Gund Partnership

Design team:
BarberMcMurry: Kelly Headden, AIA; Mike Driskill, AIA; Karen Williamson; Gund: Dan Rutledge, AIA

Client:
Webb School of Knoxville; Scott Hutchinson, President

Capacity:
973 (students and faculty)

Space/student:
35.9 sq. ft.

Area:
35,000 sq. ft.

Total cost:
$9.2 million

Cost/square foot:
$262

Completion:
October 2007

Photographers:
David Massengill; Charles Brooks









Webb School of Knoxville's vision was to elevate the standards of science education at private schools. The 35,000-square-foot Clayton Science Center embraces the idea of collaborative interaction among students and faculty while providing maximum flexibility to address future needs.

The building's siting required relocating the main road that services the administration and the Upper School. This provided an opportunity to segregate vehicular and pedestrian traffic flows, keeping vehicular traffic around the perimeter and creating a much stronger campus orientation.

The lower level includes physics and biology labs, a small-projects lab for advanced study and a greenhouse. The upper level houses the environmental sciences and chemistry labs. Modern laboratory/classrooms are designed to combine lab and lecture spaces with smart-classroom technology.

A dramatic glass atrium provides a welcoming entry from both the Upper School and Founders Commons. The facade of the south classroom wing is conceived as a simple edge that backdrops the new amphitheater. Splaying the north classroom wing creates lounges at the ends of the building, and a linear skylight lights the building center. Glazed corridor walls foster visual connections among vibrant classroom activities.

Van Wert 6-12 School and Scott M. Niswonger Performing Arts Center of Northwest Ohio · *Van Wert, Ohio*





Buehrer Group Architecture & Engineering, Inc.

Associated firm: Fisher & Associates

Design team:
Huber Buehrer, FAIA, PE, Project Manager; James Price, AIA, Project Architect; Don Burris, Eric Wiemken, Construction Administrators; Vernon Wiersma, ASLA, Landscape Architect; Sherri Sherock, IIDA, NCIDQ, Interior Designer; Sam Muhsen, PE, Structural Engineer; Corey Zachel, PE, Electrical Engineer; Chris Gaffney, PE, Mechanical Engineer

Client:
Van Wert City Schools; Ken Amstutz, Superintendent

Capacity:
1,349

Space/student:
209 sq. ft.

Area:
281,775 sq. ft.

Total cost:
$40,427,664

Cost/square foot:
$143.48

Completion:
February 2007

Photographer:
Edward Glowacki

Van Wert City Schools' 6-12 School and the privately funded Scott M. Niswonger Performing Arts Center of Northwest Ohio (NPAC) is a 281,775-square-foot building designed for 1,349 high school and middle school students. The floor plan has four main building functions: high school on the south, middle school on the north, athletics on the west, and performing arts on the east.

Separation of the high school and middle school students was an important issue for the school district. Classroom entrances, student dropoff and parking were placed on opposing sides of the school, allowing the shared spaces of the library and dining to act as the center separating "spine."

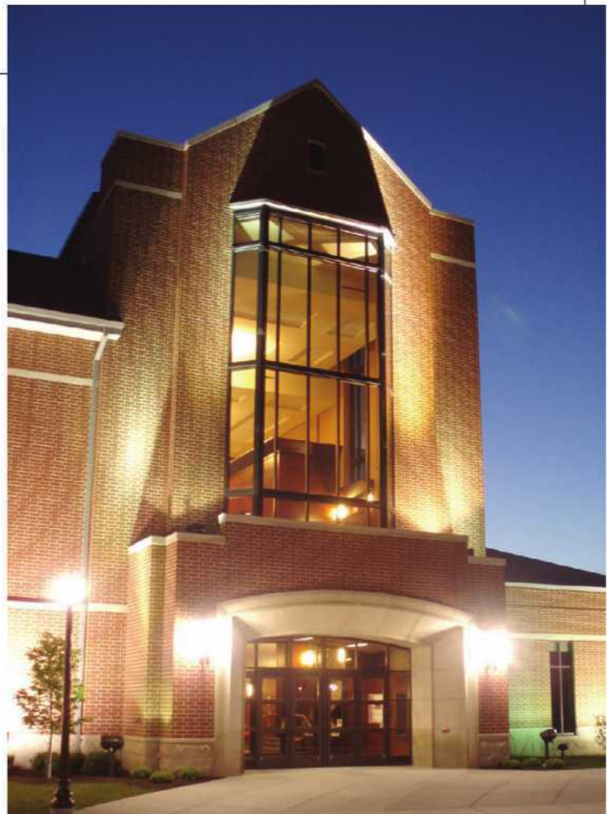
Spaces for the arts, including instrumental, vocal, art and industrial arts, are adjacent to the performing-arts center, taking advantage of the stage, practice space, and scene and set construction for stage productions.

The grand lobby of the NPAC, with its 55-foot ceilings, invites the public into a regal space of granite floors, stairs and custom Anegre wood wall panels. It is flanked by a lecture hall seating 1,275 to one side and the grand auditorium on the opposing side. The auditorium provides comfortable seating for 1,200 patrons. With its "flying" balcony, stage and full-fly lofts, it is one of the finest performance areas in northwestern Ohio.

The high school gym provides seats for 2,512 fans. Other athletic spaces include six locker rooms, weightrooms and a wrestling room. A middle school gymnasium enables 522 spectators to view sporting events and has four accompanying locker rooms. The 9,700-square-foot student dining space/lobby accommodates pre- and post-game athletic celebrations and student gatherings.

When simultaneous athletic and cultural events occur, parking congestion is avoided by having the two large public venues at opposing ends of the school facility.

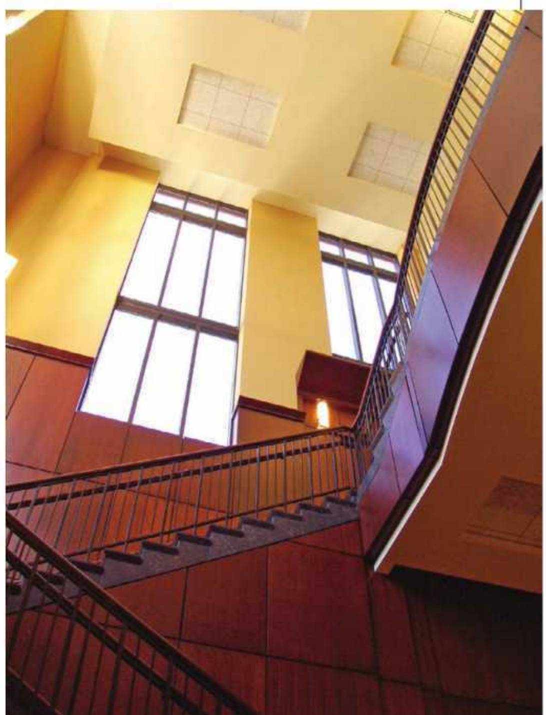














SPECIALIZED FACILITY

Upper Main Line YMCA
Berwyn, Pennsylvania



Cope Linder Architects

Design team:
Steven W. Henkelman, Partner-in-Charge; Ellen A. Levin, RA, Project Designer; Joseph T. Schwindt, RA, Project Manager; Erika L. Civitella, Project Architect; Michael S. Nardella; A.W. Lookup, Structural Engineer

Client:
Upper Main Line YMCA; Joseph E. Tankle, CEO

Area:
32,300 sq. ft.

Total cost:
$11 million

Cost/square foot:
$340

Completion:
August 2007

Photographer:
Pascal Blancom



The YMCA of the Upper Main Line has a mission to be "the leading charitable community resource ... dedicated to building healthy spirit, mind and body through programs and services that nurture children, strengthen families and build strong communities." That mission was difficult to fulfill given the existing physical conditions. Years of incremental growth had resulted in a disorienting maze of classrooms, meeting space, exercise rooms and administrative space.

The new addition helped bring clarity to the chaos, unifying the functions of the facility and repairing disjointed circulation. Taking advantage of the dramatic transparent entrance, the design creates a sense of depth, and vibrancy was created by using color as an organizational element while also reinforcing the program identity. The Y now is a beacon for the community, providing programs in aquatics, tennis, arts, health and fitness, dance and environmental education.

Affirming the belief that design improves daily life, attendance is up at the new facility. The number of programs and classes have increased greatly, introducing the Y to an expanded audience.







Aurora University, Institute for Collaboration

Aurora, Illinois













Cordogan Clark & Associates, Inc.

Design team:
John Cordogan, AIA; John Clark, AIA, LEED AP; Jennifer Villena-Johnson, AIA; Christopher Dall, Project Architect; Bill Conner, Lighting Design; Stan Roller, Acoustician; Brian Lubnow, Boldt Construction

Client:
Aurora University; Rebecca Sherrick, President

Capacity:
29 classrooms; 500-seat Crimi Auditorium

Area:
68,148 sq. ft.

Total cost:
$15 million

Cost/square foot:
$220

Completion:
January 2005

Photographers:
Ziken@photographics; balloggphotography.com; Antuany Smith/CC&A

The Institute for Collaboration is an innovative, collaborative, real-world learning laboratory that incorporates tutoring, community service and professional certification. Built on the south edge of campus, it complements existing "Richardsonian Romanesque" campus architecture, while comfortably integrating contemporary building technologies.

This 68,000-square-foot building includes 29 dedicated classrooms; more than 60 office spaces and resource rooms; the 500-seat Crimi Auditorium; and the "Cyber-Lab" donated by The Caterpillar Corporation. It also houses the "Communities In Schools" program.

The Institute for Collaboration reflects the goals of the No Child Left Behind Act, focusing on achievements of all students. It is a teaching/learning laboratory where student teachers and faculty work directly with elementary school children on campus.

This unique "school-within-a-university" educational model integrates 200 fourth- and fifth-graders (eight classroom sections) in a total immersion program with Aurora University students; practicing K-12 teachers (graduate and doctoral students); human-service professionals; community youth; wellness and educational agencies; and the general resources of Aurora University.

Kirkwood High School, Earl and Myrtle Walker Science Center
Kirkwood, Missouri



Dickinson Hussman Architects

Design team:
Dwight A. Dickinson, AIA, Project Principal; Donald G. Hussman, AIA, Design Principal; James H. Schurk, AIA, Project Designer; Laura S. LeFevre, Associate AIA, Project Manager; Pamela M. Rodebaugh, Interior Designer; James T. Biehle, AIA, Inside/Out Architecture, Inc., Science Planning Consultant

Client:
Kirkwood R-7 School District; David Damerall, Superintendent

Area:
50,566 sq. ft.

Total cost:
$8.8 million

Cost/square foot:
$174

Completion:
August 2007

Photographer:
Debbie Franke Photography



The Earl and Myrtle Walker Science Center features 15 combined science laboratory/classrooms, including support space for dedicated preparation rooms, storerooms and administrative offices. The new facility links three independent buildings into one cohesive educational structure.

Basic planning elements such as the development of student-centered, inquiry-based science labs, adaptable for a variety of learning environments, and the establishment of a facility that would be founded on a multifaceted science curriculum became the guiding principles of the new building. The typical 1,450-square-foot laboratory/classroom provides students with flexible space when they are in the classroom area and appropriate space to work safely when they are in the laboratory.

The Walker Science Center, designed as a two-story structure, is arranged with eight laboratory/classrooms on the upper floor, dedicated for chemistry and physics. The lower floor contains seven laboratory/classrooms dedicated for biology and physics. Each department has a centralized preparation area/workroom, and all departments share a conference area/workroom that can be converted to a project-based classroom.





SPECIALIZED FACILITY

Kirkwood High School, Physical Education Building
St. Louis, Missouri







The physical-education building at Kirkwood High School, originally constructed in 1954, and later expanded and modified in 1962, needed significant renovation and expansion in order to continue to deliver high-quality educational opportunities. As part of the district's $28 million referendum approved by voters in 2005, the facility was redesigned through a master-plan process.

The first phase of development called for air conditioning and a fire-suppression system to be added in the existing complex, as well as the construction of a new competition gymnasium.

This building modification changed student and public access from the west to the south facade. This strengthened existing student circulation patterns and improved safety and security by establishing a highly visible point of entry adjacent to the main high school entrance.

The new competition gymnasium is flanked by a concession area, men's and women's toilets, and a public lobby that is designed as a pre-function space.

Later phases of development will renovate the remaining portions of the building, including the former practice and varsity gymnasiums.



Dickinson Hussman Architects

Design team:
Dwight A. Dickinson, AIA, Project Principal; Donald G. Hussman, AIA, Design Principal; James H. Schurk, AIA, Project Designer; Laura S. LeFevre, Associate AIA, Project Manager; Pamela M. Rodebaugh, Interior Designer; Heather J. Schneider, Project Architect

Client:
Kirkwood R-7 School District; David Damerall, Superintendent

Area:
22,574 sq. ft.

Total cost:
$5,230,000

Cost/square foot:
$231.68

Completion:
April 2008

Photographer:
Debbie Franke Photography

Brigham Young University, Gordon B. Hinckley Alumni and Visitors Center · *Provo, Utah*



FFKR Architects

Design team:
Frank Ferguson, FAIA; Mark Wilson, AIA; Barry Becker, AIA; Osamu Uchiyama

Client:
Brigham Young University; Ole Smith, Assistant Administrative Vice President, Physical Facilities

Area:
83,793 sq. ft.

Completion:
June 2007

Photographer:
Michaelene O'Keefe

The Gordon B. Hinckley Alumni and Visitors Center is a welcoming home for visitors and alumni to the Brigham Young University campus. The dual purpose of the building is to serve alumni and visitors, and merge two complementary functions that previously had been housed separately.

The building accommodates either intimate or large gatherings. It has a "family room," visitor's center, assembly hall and conference rooms on the main level. Within the family room, a cozy area with a fireplace is surrounded by two-story windows. The design includes a business center on the second floor that accommodates visiting alumni. The administrative offices for the alumni association are on the upper floors, and its boardroom and library are on the main level.

The building is on a prominent edge of campus overlooking Utah Valley. The front is on West Campus Drive, and views are evident through the building at the main entry. The family room and assembly room open to the west into a generous backyard with spectacular views.











Stamford Public Schools, Academy of Information Technology and Engineering · *Stamford, Connecticut*









Fuller and D'Angelo PC Architects and Planners

Design team:	Joseph Fuller Jr., AIA, Principal-in-Charge; Said Zomorrodian, Chief Designer; William J. Means, RA, Project Architect
Client:	City of Stamford; Paul Gross, Principal
Capacity:	650
Space/student:	186 sq. ft.
Area:	121,000 sq. ft.
Total cost:	$38 million (with FFE/IT)
Cost/square foot:	$314
Completion:	September 2007



The city's requirements included a program for an information-technology specialty magnet high school, a 650-student facility for grades 9 to 12. This translates into 121,000 square feet per the state's Bureau of School Facilities' requirements.

The Academy of Information Technology and Engineering in Stamford, Conn., is three stories, connected by a tapering cantilevered main staircase in the atrium. It consists of 40 classrooms, five science labs, seven computer labs, a library/media center, exercise rooms, a gymnasium, dance studio, music suites, digital arts, an atrium, amphitheater and 350-seat cafeteria.

The challenge of the overall school design was to use the proper vocabulary of architecture, engineering and information technology to create a functional, sculptural school building that engages high school students. While they are satisfying the required curriculum, pupils are able to learn the fundamentals of construction by observing the immediate interior and exterior environment.

The engineering aspects of various areas were conceived to have the structural, mechanical, electrical and information-technology components exposed to view. This assists student learning because the building also is their guide.

Matapeake Middle School and Ninth-Grade Academy
Stevensville, Maryland



Gilbert Architects Inc.

Design team:
Jeffrey P. Ludwig, AIA, Vice President, Principal-in-Charge; Lawrence P. Levato, AIA, Senior Project Manager; Kelly Groom, Interior Designer

Client:
Queen Anne's County Public Schools; Carol Williamson, Superintendent

Capacity:
800

Space/student:
144.5 sq. ft.

Area:
115,609 sq. ft.

Total cost:
$24,783,260 (includes sitework)

Cost/square foot:
$214.37

Completion:
August 2007

Photographer:
Lisa Masson Photography





This new middle school is situated at the gateway to Maryland's scenic Eastern Shore. Designed around a nautical theme, the main lobby promenade forms a ship's hull that extends between the two main entrances to the school and separates public-use spaces (physical-education suite with stage, cafeteria and music suite) from the academic portions of the building. The administration area oversees building access of all students, parents and visitors. The media center is situated centrally for access by all grades.

Up to 500 middle school students are enrolled in grades 6 to 8, and 300 students are on the second floor in the ninth-grade academy.

The floor plan is organized around a grade level "village" arrangement for the middle school and two small learning communities for the ninth-grade academy. These smaller schools-within-a-school support and encourage the fundamental curriculum practices of the school system and create a friendly education atmosphere.





Zeeland Public Schools, Zeeland Natatorium
Zeeland, Michigan







GMB Architects-Engineers

Associated firm: Acoustics By Design, Acoustical Engineer

Design team:
Tom VanDeGriend, AIA, Principal; Rob DenBesten, AIA, Project Architect; Ron Snoeyink, Mechanical Engineer; James Harrison, PE, Pool Engineer; Randi Paananen, PE, Electrical Engineer

Client:
Zeeland Public Schools; Gary Feenstra, Superintendent

Capacity:	Area:	Total cost:	Cost/square foot:
552 seats	47,800 sq. ft.	$9,082,000 (construction)	$190

Completion:
July 2006

Photographer:
Michael Collyer Photography

This project represents a community with a long-standing tradition of excellence in aquatic programs. The facility provides high schools a competition venue and enhances the offerings of the recreation department.

The design concept was to balance the fluid and machine-like nature of a competitive aquatic venue. The sun-control devices provide visual excitement, promote a machine-like feel, and eliminate direct glare on the water.

The interior is flooded with natural light via clerestory windows, making for a more healthful environment and dramatically reducing energy consumption from artificial lighting. The canopy over the spectator area innovatively uses a translucent panel, which diffuses and reflects sunlight, providing soft natural light throughout the space. The canopy also provides appropriate scale at the spectator area.

The curved roof not only efficiently provides needed height for spectators, but also suggests the fluid-like motion associated with aquatics.

A glass wall between the pool and school lobby creates interaction among activities within the natatorium, henceforth enhancing safety and security.

Promoting energy-efficient design, the mechanical system connects to a central geothermal system that includes 20 miles of underground piping for the geothermal/earth heat exchanger. It serves as the energy source for heating and cooling the building.



Jordan Applied Technology Center
West Jordan, Utah





HFSArchitects

Associated firms: Reaveley & Associates, Structural; Olsen & Peterson, Mechanical; BNA Consulting, Electrical; Brent Morris Associates, Landscape

Design team:
Barry Smith, AIA; Robyn Smith, AIA; Mark Pavoni, AIA

Client:
Jordan School District; Randy Haslam, Director of Facilities

Area:	Total cost:	Cost/square foot:
86,307 sq. ft.	$10,261,644	$118.90
Completion:	**Photographers:**	
August 2005	Chris Harmon; Mark Pavoni	

The Jordan Applied Technology Center is a creative and innovative joint-use building—the result of an unprecedented partnership between the Jordan School District and Salt Lake Community College (SLCC). It serves high school students by day and college students by night. SLCC's concurrent enrollment program allows students to enroll in college-level classes for both high school and college credit.

This cutting-edge facility includes programs for biotechnology, CAD, computer and CIM labs, pre-engineering, certified nursing, surgical technology, Ed Net and an electronics lab.

The campus design motif is "high desert mountain" architecture. The building sits on a base of native Utah sandstone. The brick veneer with precast lintels and sills recalls the traditional masonry detailing, which is juxtaposed against the modern, curved curtainwall used in the public areas.





High school students who take advantage of this state-of-the-art technology center will be prepared to further their education by earning up to two years of college credit or to enter the workforce with the skills and experiences needed for success.

Beaver Country Day School, Athletic Center

Chestnut Hill, Massachusetts



HMFH Architects, Inc.

Design team:
George Metzger, AIA, Principal; Arthur Duffy, AIA, Project Architect

Client:
Beaver Country Day School; Peter Hutton, Head of School

Capacity:
650 (for seated events)

Area:
23,300 sq. ft.

Total cost:
$5.7 million

Cost/square foot:
$245

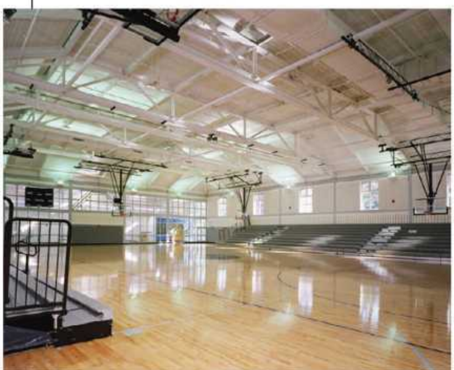
Completion:
August 2008

Photographer:
Wayne Soverns Jr.

This much-needed athletic center defines the western edge of campus and serves the increasing athletic, fitness and team needs of the school's 400 students. The recently completed Arts Center bookends the 1920s-era main building and mitigates the discordance of earlier additions. A new entry plaza links old and new, and has become a vibrant gathering spot for students, teams and visitors.

From the plaza, the skylighted gallery runs through the building, opening into the competition-size gym and leading out to the upper playing fields beyond. The bright daylighted gymnasium accommodates varsity athletic competition and schoolwide events, with bleacher seating for 650 spectators. The locker wing includes separate upper- and middle-school facilities, plus training, fitness and office spaces. Continuing the emphasis on natural lighting, the locker rooms and fitness center are flooded with daylight from carefully placed skylights and windows.

Attention to detail—from acoustic treatments in the main gym and polished concrete floor of the gallery, to brightly painted walls in locker rooms, offices and the fitness center—provides high performance and elegance in this heavily used, high-traffic building.









Hillsboro R-III School District, Athletic Complex

Hillsboro, Missouri







Hillsboro R-III School District is situated in a rural community south of St. Louis. The site development proved to be the most significant challenge—converting the rocky terrain into a site for a new high school athletic complex.

A new ticket booth has covered access that controls and directs the public into the complex. The entrance also adapts to a significant change in elevation by the use of grand stairs and an accessible ramp.

The facility includes an eight-lane polyurethane running track with space for the appropriate field events. The track and baseball field are lighted for evening events.

The athletic field includes new synthetic turf, a press box and grandstands with the capacity for 1,445.

The baseball field was constructed with natural grass and includes an underground sprinkler system, two warmup cages with dugouts and double batting cages.

The concession/restroom facility is situated centrally and includes concession windows with storage and a complete dishwashing area.

The facility master plan envisions a future softball field and training/weightroom facility.



Hoener Associates, Inc., Architects

Design team:
Mark Reuther, Principal-in-Charge; ASDG, LLC, Structural Engineer; McClure Engineering Associates, MEP Engineer; Associated Land Surveyors and Engineers, Inc., Civil Engineer

Client:
Hillsboro R-III School District; Tom Muzzey, Assistant Superintendent

Total cost:
$3,664,703

Completion:
September 2006

Photographer:
Kevin Lowder

University of Texas at Austin, Jack S. Blanton Museum of Art
Austin, Texas



Kallmann McKinnell & Wood Architects, Inc.

Associated firm: Booziotis & Company

Design team:
KMW: Michael McKinnell, Don Eurich; Booziotis: Bill Booziotis, Aaron Farmer, Jess Gallaway, Mathew Crummey, Ron Gordon

Client:
University of Texas at Austin; Jesse Otto Hite, Museum Director

Capacity:
2,089

Area:
120,000 sq. ft.

Total cost:
$58 million

Cost/square foot:
$483.33

Completion:
May 2006

Photographer:
Emery Photography/emeryphotography.com

The Jack S. Blanton Museum of Art is in a cultural precinct where the urban grids of Austin and the university intersect to inform the geometry of this two-building complex. The site also establishes a dynamic gateway—a threshold between city and campus.

A beautifully landscaped pedestrian plaza captures the visual axis of the state capitol and serves as the center for the museum complex.

The gallery building is organized around a dramatically shaped atrium, connecting ground-floor galleries and a monumental stair ascending to the second gallery floor above, which organizes the galleries into two rings. The frequent connections between the smaller and larger galleries provide numerous processional options to personalize the viewer's art experience. A unifying architectural language of wall and vaulted ceiling shapes further integrate these galleries.

The scale, proportion and figuration of the exterior facades are sympathetic to the language and nobility of Paul Cret and Cass Gilbert's architectural work at the university and use the same indigenous materials: Texas "red radiant" granite, various Texas limestones and red clay roofing tiles.









Badger High School, Art and Fitness Addition

Lake Geneva, Wisconsin



Kehoe-Henry & Associates, Inc.

Design team: William R. Henry, Architect, PE, Principal-in-Charge; Daniel R. Kehoe, Project Architect; Tom Pertzborn, Project Manager, J.P. Cullen & Sons, Inc., General Contractor	
Client: Lake Geneva-Genoa City Union High School District; Warren Flitcroft, Director of Business Services	
Capacity: 500	**Space/student:** 120 sq. ft.
Area: 59,900 sq. ft. (total); 29,400 sq. ft. (Art and Fitness Addition)	
Total cost: $9,288,250 (total); $4,279,750 (Art and Fitness Addition)	
Cost/square foot: $145.57	**Completion:** May 2008
Photographers: Bill Henry; Don Hammon	







Badger High School needed space for another 500 students and updated arts facilities to serve more than 2,100. Its small weightroom was inadequate to meet the needs of athletes and the health and lifetime fitness physical-education curriculum.

The solution was two, two-story additions to minimize the footprint on an already tight 40-acre site. The 21-classroom addition accommodates more than 500 students. The art and fitness addition has several unique features, beginning with a dramatic two-story atrium and a 24-foot skylight connecting the existing building to the new.

Student works are displayed professionally in the art gallery. Each classroom/studio is designed for a different form of visual arts. Traditional studios and specialized areas are provided for pottery, metals, stained glass, photography and graphic arts. The pottery studio has 24 pottery wheels and a gas-fired kiln, which typically is found only in university-level studios.





The new 8,000-square-foot cardio/fitness center is entered through the two-story atrium and is directly accessible from the exterior for use during non-school activities. A large curtainwall offers views over the athletic fields and an adjacent state park.

A 54-inch concrete municipal storm sewer underneath the addition posed a unique challenge. Relocation was estimated at $115,000. The architect persuaded the city to allow the pipe to remain and to permit construction over the top with extra-wide footings to minimize soil pressure. Another $90,000 was saved by using utility-size brick instead of modular.

Three-inch acoustical roof deck on steel joists at 80-foot-long centers was left exposed to maximize volume. Two 5-foot-deep by 8-foot-long joist girders create a column-free space. To accommodate wide studios below and support the fitness equipment, the design uses 12-inch precast plank with 4-inch concrete topping for the second-floor structure. Air-handling units are connected to the existing hot- and chilled-water systems.

Georgia Southern University, Recreation Activity Center

Statesboro, Georgia



Lyman Davidson Dooley, Inc.

Associated firm: Hastings & Chivetta Architects, Inc.

Design team:
KSI/Structural Engineers; Water Technology, Inc.; Jordan Jones & Goulding; Nottingham Brook & Pennington; Commissioning & Green Building Services; Spiker Baldwin & Associates; Costing Services Group, Schirmer Engineering

Client:
Georgia Southern University,
Campus Recreation & Intramurals (CRI);
Gene Sherry, CRI Director

Area:
213,405 sq. ft. (total): 135,027 sq. ft. (new);
78,378 sq. ft. (existing)

Total cost:
$27,116,441 (total): $23,116,441 (building);
$4 million (site/park)

Cost/square foot:
$171.20

Completion:
August 2007

Photographer:
Thomas Watkins









This recreation building was more than doubled by a 135,000-square-foot addition, which extended the existing circulation concourse to provide great visibility to all venues.

The entrance lobby provides an expansive public space that is used heavily for various campus activities. The aquatic center features a 25-meter indoor competition pool with diving, 50-person indoor spa, classrooms, lockers, a sauna, outdoor leisure pool, vortex and pool pavilion. The ground floor features free weights, weight machines, a two-court multi-activity court (MAC), two-court gym, outdoor adventure center, climbing wall, combatives, dance/cheer, spinning, mind/body, classrooms, offices, a lobby cafe, one-court MAC, three-court gym and racquetball courts.

The second floor features wellness/fitness, a cardio balcony and running track, seminar room and aerobics rooms. McAnderson Park was upgraded with a retention lake, smart irrigation system, new and renovated fields, a new pedestrian concourse, sand volleyball, plaza/band pavilion/amphitheater, walking/jogging trails and landscape/parking improvements.

The project has been submitted for LEED certification.

The Howard School
Atlanta, Georgia









Niles Bolton Associates

Associated firm:
Suzanne Seymour Interiors

Design team:
Brian Dempsey, PM; Mohamed Mohsen, Gregg Hudspeth, Bettie Bragg, Suzanne Seymour

Client:
The Howard School; Marifred Cilella, Director

Capacity:
180

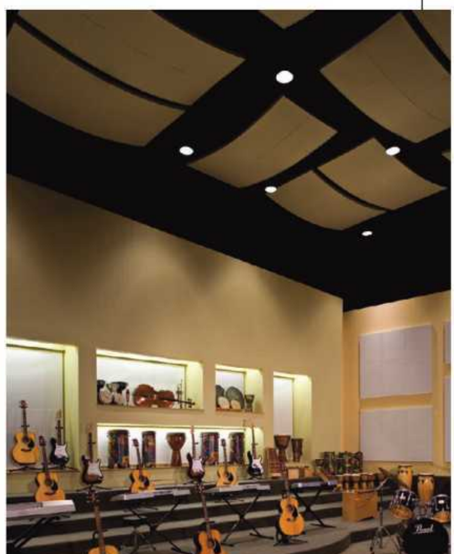
Area:
40,000 sq. ft. (classrooms); 16,000 sq. ft. (gym)

Total cost:
$12 million

Cost/square foot:
$150 (classrooms); $175 (gym)

Completion:
December 2006

Photographer:
Brian Robbins



The new campus for The Howard School is on a 13-acre parcel adjacent to a former mill building along a busy rail spur. It is a significant piece of the burgeoning urban redevelopment on the west side of Atlanta. In relocating its campus from two historic houses in the established neighborhood of Druid Hills, to a transitional industrial neighborhood, the school took a leap of faith and, in turn, became pioneers of urban development.

The Howard School is a private K-12 school that caters to students with auditory, learning and concentration issues. The design for the school's new campus needed to be reflective of the neighborhood aesthetics and the school's unique teaching style. The design focuses on five main points of emphasis to enhance learning:

•**Flexibility**. Spaces are designed to be reconfigurable, expandable and with ample space for display.

•**Comfort**. The building was designed with materials that are less institutional in feel. Spaces are acoustically separated, and tuned with indirect artificial lighting and ample daylighting for better concentration.

•**Context**. The exterior of the buildings fit into the area, with long gable and shed forms, a silo-like tower with exposed-steel structure and an industrial material palette.

•**Sustainability**. The Howard School spent a tremendous amount of time and money to remove debris and soil from the site, and hauled in new dirt as a base for the school. The building uses sustainable materials such as bamboo, metal paneling, steel roof deck, and vinyl and concrete flooring to form a healthful environment that requires less maintenance.

•**Community**. The school contains two focal points: a library overlooking the city, which is used by outside groups for seminars, and a black-box theater that uses a hangar door to open to an exterior amphitheater.

Charles River School, Activity Center

Dover, Massachusetts







Before



Olson Lewis Dioli & Doktor Architects & Planners, Incorporated

Design team: Christopher T. Doktor, AIA; Brendan T. O'Donoghue, Daniel Cornish, Michele Brooks	
Client: Charles River School; Catherine Gately, Head of School	
Area: 12,000 sq. ft. (new); 12,000 sq. ft. (renovation)	**Total cost:** $6 million
Cost/square foot: $250	**Completion:** February 2008
Photographer: Dan Gair/Blind Dog Photo	

The challenge for designers was to find opportunities to fulfill new programmatic needs on a campus whose structures already were functioning at full capacity.

The solution for Charles River School's new Activity Center was found through converting and expanding the existing, prefabricated tennis barn. The architectural team re-engineered this standalone structure into a modern, multipurpose center.

The rhythm of fenestration and use of similar cladding create familiar patterns on the facade, unifying the campus and reinforcing the school's architectural character.

Within the two-story addition, the lower level includes physical-education faculty offices, storage and locker rooms, along with a sizable lobby and adjacent hallway used for class dismissal and pre-assembly space for the modern gymnasium. The design team was sensitive to the combined athletic focus, as each sport requires specialized lighting locations and flooring materials.

On the second floor, a large communal dining room and kitchen are accessible by elevator and communicating stairs. This space is used for school lunches and a variety of academic programs and faculty functions. The window wall provides natural lighting and picturesque views of the commons.



Embry-Riddle Aeronautical University, Dining Commons
Prescott, Arizona



NTD Architecture
Design team: Scott Beck, AIA, REFP, Project Principal; Don Weiser, AIA, Project Architect
Client: Embry-Riddle Aeronautical University; Dita Peatross, Director
Capacity: 220
Area: 17,500 sq. ft.
Total cost: $4.6 million
Cost/square foot: $262.85
Completion: January 2008

Embry-Riddle's enrollment for 2008 was projected to be a little more than 1,500 students, including 30 graduate students. The campus is a mixture of existing buildings from the original Prescott College and modern additions and renovations by Embry-Riddle. Despite its size, it's a residential campus. With enrollment numbers increasing at institutions statewide, the campus has been charged with meeting the needs of expanding program numbers and accompanying campus amenities.

The architect was commissioned to design ERAU's new dining commons. The facility is central to the campus residential buildings. The design team created a modern, multi-use dining commons with multiple servery lines of fast-food varieties, as well as standard hot/cold lines with deli and salad bar options. Students in this temperate climate enjoy the option of a spacious dining area inside or enjoying their meal outside in the courtyard.

This 17,500-square-foot dining facility is situated strategically at the base of a hillside, which slopes toward the main campus. Constructed of materials used in other buildings on campus, the building's exterior presents a collage of color, yet provides continuity to celebrate the building's function as a student gathering area.

The dining area is designed to accommodate 220 seats. It has two servery islands in the dining area and a primary server line adjacent to the main kitchen. Openings are situated to provide natural light and buffer direct sunlight. Students also can take advantage of wireless Internet access. Another highlight of this facility is its multipurpose functionality, allowing the dining area to be divided for meetings or campus events.









Lincoln Public Library at Twelve Bridges Learning Center
Lincoln, California















This library is housed at a unique shared-use campus developed by Sierra Community College, Western Placer Unified School District and the city of Lincoln. In addition to supporting blended programs that involve all students, the facilities will serve the individual needs of Lincoln citizens, college students, high school students and business partners.

The Lincoln Public Library represents the first joint-use building design to emerge from the master plan. The curriculum and planning process represents a community effort that involved all three agencies and local citizens. The library exists as a pivotal point on the site, acknowledging the space where all parties come together. The library houses a comprehensive, multi-generational collection.

This public facility is designed to be a beacon of lifelong learning for the entire community.

NTD Architecture

Design team:
Jordan Knighton, AIA, Principal-in-Charge; Mike Marquez, Designer

Client:
City of Lincoln, Sierra Community College District, Western Placer Unified School District; Gerald Johnson, City Manager

Area:
39,311 sq. ft.

Total cost:
$11,136,489

Cost/square foot:
$283.29

Completion:
October 2007

Photographers:
Steve Whitaker; Gregory Blore Photography

Washtenaw Community College, The Health & Fitness Center
Ann Arbor, Michigan









Ohlson Lavoie Collaborative

Associated firm: Bowers & Rein Associates, Local/Landscape Architect

Design team:
OLC: Hervey R. Lavoie, NCARB; Charlie Snider, Aquatic Design; Bruce Lutz, IIDA, Interior Designer; James A. Blum, PE, Granger Construction Company, General Contractor; James W. Ellis, Power Wellness Management, Prog./Ops. Cons.; Robert Wanty, PE, Washtenaw Engineering, Civil Eng.; Street Schellhase, PE, KYSE Structural Engineers, Structural Eng.; Michael Ballard, PE, The Ballard Group, Inc., Mechanical Eng.; Jon Brooks, PE, AE Design Group, Inc., Electrical Eng.; Ashley Muse, LEED AP, Rocky Mountain Institute, LEED Consultant; Mahmoud El-Gamal, PE, PSI, Geo-Technical Consultant

Client:
Washtenaw Community College;
Damon Flowers, Assistant Vice President, Facilities Development/Operations

Area:
76,000 sq. ft.

Total cost:
$14.1 million

Cost/square foot:
$185

Completion:
August 2007

Photographer:
Chris Burkhalter Photography, LLC

The Health & Fitness Center has been recognized as the first LEED gold-certified student health and wellness center. The newest building on the Washtenaw Community College campus is a tribute to the latest breakthroughs in sustainable design.

From the beginning, the design of the center emphasized creativity and sustainability. The design team addressed a long list of environmental challenges and set its sights on obtaining the highest possible certification.

The facility is built on the site of a former soccer field and just yards away from Huron River. Designers had few restrictions on their creativity; they focused on the main objectives set by the college: potential for the most green design practices possible; a sense of openness; a design that would be the campus centerpiece; and a functional facility that would promote healthful living.

The design team met those objectives and designed a stunning 76,000-square-foot facility that achieves LEED gold standards by incorporating many sustainable and renewable features throughout construction and interior design. All













materials were selected in order to set a responsible and eco-friendly example that represents the awareness level of the college and greater Ann Arbor community.

This facility has two levels and an array of amenities, including state-of-the-art cardio and strength-training equipment; four group-exercise studios offering yoga, Pilates and spinning classes; a full-size basketball and volleyball court; indoor lap pool and warm-water therapy pool; full-service locker rooms; walking/jogging track; "Kids in Motion" childcare; a cafe; retail store; and classrooms for community meetings and events. The center also offers personal training and nutrition counseling.

The Health & Fitness Center is a unique facility providing fitness and health resources and services to students and staff, as well as residents of Ann Arbor.

The Richard E. Berry Educational Support Center and Athletic Stadium · *Cypress, Texas*





PBK	
Design team: Dan Boggio, AIA, President/CEO; Irene Nigaglioni, AIA, REFP, Principal-in-Charge; Luis Salazar, Project Manager; Richard Chi, Project Designer	
Client: Cypress-Fairbanks Independent School District; David Anthony, Superintendent	
Area: 276,245 sq. ft.(Educational Support Center)	
Total cost: $72,897,808 (Educational Support Center, stadium and fieldhouse)	
Cost/square foot: $165	**Completion:** March 2006
Photographer: Jud Haggard Photography	



A landmark for the community of Cypress-Fairbanks Independent School District (CFISD), the Richard E. Berry Educational Support Center (Berry Center) provides a comprehensive, multipurpose venue for district events, athletic competitions, fine-arts performances and conferences. The only facility of its kind in the nation, the Berry Center exudes excellence in design, functionality and community connectivity.

The center combines six unique venues on one site: district administrative offices that house the athletic department, building management and "Partners in Education" programs; a two-level indoor arena that accommodates 9,500 spectators at full capacity; a 16,000-square-foot conference/staff development center that can be reconfigured into 16 spaces for staff training, conferences and receptions; a 456-seat performing-arts theater; a commercially equipped kitchen, catering facility and satellite food-production center; and an 11,000-seat football and soccer stadium that connects to the main facility and offers full-service concession stands, public restrooms, a two-story press box, as well as additional shell space for future expansion.

The district's decision to combine an 11,000-seat stadium and a 9,500-seat arena on the same site allowed designers to maximize parking and circulation efficiency, save on site costs, and provide the most energy-efficient venue for all project requirements.



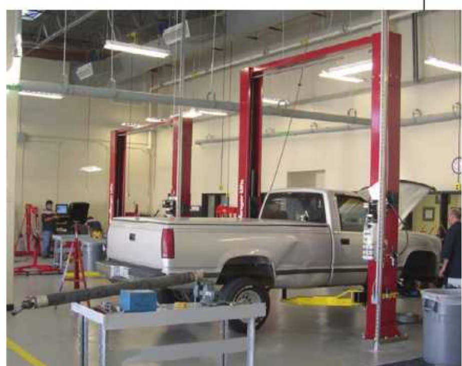
The interiors of the Berry Center are designed to highlight the celebration of student achievement. An abundance of color and patterns on the interior showcases the "academic life" of a student attending CFISD schools. To honor the district's longstanding tradition of honoring student and teacher "stars" every year, the Texas Lone Star logo theme and graphics are applied throughout.

Sarah & Troy LaGrone Advanced Technology Complex
Denton, Texas









The main concept behind creating the Sarah & Troy LaGrone Advanced Technology Complex was to design a building that would enable students to learn in a technical and professional environment, and prepare them for the "real world." Situated in the Denton Independent School District, this specialized facility offers top-notch educational programs with customized, state-of-the art career and technical learning environments.

During programming, designers faced many interesting challenges. A key challenge involved designing a green, environmentally friendly facility. A design was developed to work with the topography and preserve the natural organic features of the site, which enabled the final design to adapt to the environment.

Constructed by using the construction manager at-risk delivery method, the facility incorporates durable, cost-effective materials throughout that are maintenance-friendly and help reduce overall life-cycle costs.

The complex accommodates a diverse range of specialized curriculum, containing nine unique academies, each designed to reflect real-world working environments. The advanced academies: pre-engineering, medical/allied health, education internship, legal and protective services, visual arts and communications, business/marketing/finance, computer technology, applied technology and personal services.

The overall design of the complex incorporates specialized elements in each academy, offering optimum learning environments. Modern design encourages teamwork and resource-sharing opportunities among all students in the same program of study. The academies also offer designated areas for student and teacher workstations that can be reconfigured for a variety of instruction delivery methods. These workstations are enhanced with technology that is available for use in everyday learning concepts.

By working closely with school district officials, the city of Denton, parents, teachers and community members, the architects gained insight into the development of this innovative facility. The complex acts as a center of unity for Denton County, offering advanced technology courses for high school students and adults.

The Sarah & Troy LaGrone Advanced Technology Complex is "one of a kind." No other facility in the nation combines all of these specialized venues on one campus and affects learning in such an innovative way. Through strategic solutions, the end users and design professionals executed a plan that intends to raise the bar for future facilities not only in Texas, but also across the nation.

PBK

Design team:
Dan Boggio, AIA, President/CEO; Fred Montes, AIA, Principal-in-Charge; Christian Herr, Project Manager; Richard Chi, Project Designer

Client:
Denton Independent School District; Ray Braswell, Superintendent

Capacity: 1,200	**Area:** 128,792 sq. ft.
Total cost: $16,696,532	**Cost/square foot:** $129.64
Completion: June 2006	**Photographer:** Jud Haggard Photography

Tarleton State University (Texas A&M University System), Recreational Sports Facility · *Stephenville, Texas*





Randall Scott Architects, Inc.

Associated firm: Hastings & Chivetta Architects

Design team:
Hastings & Chivetta Architects: Erik J. Kocher, AIA, LEED AP; Randall Scott Architects: Randall B. Scott, AIA, Greg Conaway, AIA

Client:
Texas A&M University System; Wanda L. Mercer, Vice President for Student Life

Capacity:
6,393

Space/student:
11.26 sq. ft.

Area:
72,000 sq. ft.

Total cost:
$12.2 million

Cost/square foot:
$169

Completion:
November 2007

Photographer:
Carolyn Brown

Sports activities and class instruction at Tarleton State University (Texas A&M University System) had been held in multiple facilities across campus instead of adjacent to one another in a single building. The site for the new Recreational Sports Facility, although situated among intramural fields, the running track and campus housing, offered an architectural context consisting of several unharmonious buildings and functions.

The existing materials palette of reddish/orange brick, cast stone, bronze anodized aluminum and green sloped roofing were interwoven skillfully with an updated palette of champagne solar screens, burnished CMU and acrylic plaster. The result is an excellent example of architectural nourishment on a campus in search of a leading-edge identity that will attract students for generations to come.

Upon entry into the two-story building lobby, one is visually immersed into activities in the three-court gym, strength-training area, racquetball courts, rock-climbing wall, cardio theater and elevated running track. Recreational Sports now is able to offer several state-of-the-art indoor recreational venues to its students, as well as support outdoor adventure activities.





Trojan Academy
Glasgow, Kentucky









RBS Design Group, PSC

Design team:
Jim Ivy, Architect; Kyle Abney, Project Coordinator; John Borders, Construction Manager; WBW Engineering, Inc., Mechanical/Electrical Engineer; Wilkie Engineering, Structural Engineer; American Engineers, Civil Engineer

Client:
Barren County Schools; Jerry Ralston, Superintendent

Capacity: 400	**Space/student:** 135 sq. ft.
Area: 54,000 sq. ft.	**Total cost:** $10,262,324
Cost/square foot: $190.04	**Completion:** August 2007

Photographer:
Jim Acquaviva

Barren County Schools' Trojan Academy is a unique facility. The goal was to ease the transition from middle school to high school. This eighth- and ninth-grade academy houses classrooms, a high-technology "bookless" media center, science labs, resource rooms, a multi-use cafeteria/gym/assembly area, secure entrance, administrative suites and two connectors that join the high school and middle school facilities together. Students can travel between facilities without going outside.

Trojan Academy has a naturally lighted entry foyer; instructional-technology package in each classroom with a whiteboard, sound-amplification system, overhead projector and Internet access to enhance the learning environment; variable refrigerant volume (VRV) HVAC system to efficiently heat and cool the academy; and an efficient multi-use gym/cafeteria/assembly area.

These unique elements combine to improve the instructional process and create an enhanced learning environment for students and faculty.

Indiana University, Classroom Building
Bloomington, Indiana



Rowland Design, Inc.

Design team:
Eric Rowland

Client:
Indiana University; Michael A. McRobbie, President

Area:
30,000 sq. ft.

Total cost:
$8.5 million

Cost/square foot:
$283.33

Completion:
August 2007

Photographer:
Eric Rowland

This classroom/office building provides a home for variable uses as programs evolve campuswide. Initially designed to house programs in biology and film production, the building is flexible for the future.

The grade level houses labs and classrooms, and the upper level houses faculty offices and resource centers.

The steel and wood structure is designed to integrate rationally into an immediate context of residentially scaled structures, as well as the broader historical and material context of the campus. It integrates student learning spaces in and out of the classroom.

Spaces for impromptu student/faculty interaction were incorporated adjacent to primary circulation spines.

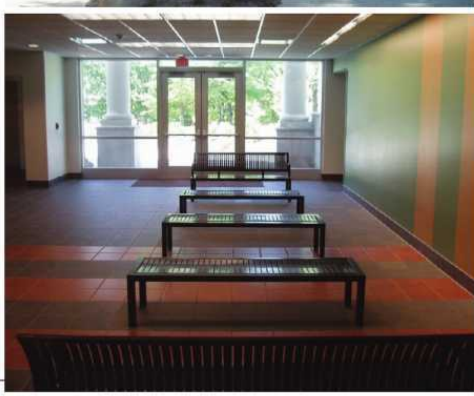
"Low initial cost" was critical, and the building's efficient rectangular plan provides a compact and optimum envelope floor/area ratio.

Daylight and assignable space are maximized. The building is rendered in a variety of Indiana limestone textures, and the sloping roof conceals rooftop mechanicals.

Sustainability is evident in the building control systems, locally sourced materials, finishes and minimized site impact. The building's mass, proportions and material palette firmly place it within the construction standards on campus.







Cayuga/Onondaga BOCES Regional Education Center

Auburn, New York





Samuel J. Cichello, Architect

Associated firms: Hewitt Monahan Associates; DiBartolomeo Engineering; Fisher Associates; Yuhas Land Design; Earth Sensitive Solutions; The Myers Group; Fetech Inc.; Eisenbach & Ruhnke Engineering; C&S Design Build Inc.

Design team:
Samuel Cichello, Project Architect; David Hunter, Project Director; John Hewitt, Mechanical Engineer; William Monahan, Electrical Engineer; Gene DiBartolomeo, Structural Engineer; James Sprague, Civil Engineer; John Yuhas, Landscape Architect; Joe Delaney, Jeff Traver, Project Representatives

Client:
Cayuga/Onondaga BOCES Board of Education; William S. Speck, District Superintendent

Area: 202,000 sq. ft.	**Total cost:** $39.2 million
Cost/square foot: $194	**Completion:** September 2007

Photographers:
Samuel Cichello; Tony Abbatiello

The challenge to designers was bringing together varied programs into one center in a manner that promotes a cohesive, efficient opportunity for students. Grouping similar programs and services into radiating wings provided a degree of exclusiveness and convenient access to the central core.

The main trades wing includes nine separate lab spaces, each with an enclosed teaching classroom. The early-childhood program is adjacent to the daycare facility, and special education and other special programs are in three other wings. Central administrative offices are the only second-floor space. Programs in the central core are culinary arts, health-related occupations, graphic arts and cosmetology. Many programs include services to residents of the community at certain times of the year.

The administration expected the new facility would incorporate energy-efficient principles and equipment, and be sensitive to the environment. Incorporating 200 geothermal wells contributed to a facility that is 43 percent more energy-efficient. Use of green practices were incorporated into the construction. This facility has applied for LEED certification.









Warsaw Community High School, Performing Arts Wing and Auditorium · *Warsaw, Indiana*









Schmidt Associates

Associated firm: Scearce Rudisel Architects

Design team: Kyle E. Miller, PE, LEED AP, Project Manager; Steven K. Alspaugh, AIA, LEED AP, Designer; Mary Ellen Rudisel, AIA, Consulting Architect	
Client: Warsaw Community Schools; Robert Haworth, Superintendent	
Capacity: 1,000 (auditorium)	**Area:** 70,648 sq. ft.
Total cost: $12,170,000	**Cost/square foot:** $172
Completion: November 2006	
Photographers: Chilluffo Photography; Scearce Rudisel Architects	

This northern Indiana high school has a rich history of academic and athletic excellence with strong, growing programs in the performing arts.

The project required three new major building components and addressed additional needs:

- Performing-arts center addition.
- Athletic addition.
- New main entry.
- Mechanical system upgrades in the existing building.
- New site master plan.

The performing-arts center addition is the centerpiece of the new work. Combining all performing-arts functions into one facility enables the school to use common support spaces for performance venues.

The new addition's massing and materials respect the strong, rural forms of the existing building, using a brick base, stone trim, metal siding, windows/curtainwall patterns, the silo shape and gabled clerestory shapes. The center's interior also uses visual connections to the existing building's materials and geometry. The auditorium stage uses a configurable automated rigging system—one of the first of its kind in the state.

With the new performing-arts center, Warsaw High School's reputation as a renowned performing-arts venue now is established.

Blue Ridge Community College, Fine and Performing Arts Building
Weyers Cave, Virginia







SFCS Inc.

Associated firm: Wilson Butler Lodge

Design team: SFCS: Tim Jamieson, FAIA; Richard Thomas, AIA; Don Pritchard, AIA; Pam Feuer, AIA; Steve Cates, PE; Ron Wiseley; WBL: Scott Butler	
Client: Blue Ridge Community College; James R. Perkins, President, BRCC	
Area: 23,500 sq. ft.	**Total cost:** $5,426,500
Cost/square foot: $231	**Completion:** May 2007
Photographer: Rick Alexander/SFCS Inc.	

Blue Ridge Community College's new Fine and Performing Arts Building is recognized as the signature building on campus. It serves as the portal to campus and responds to the college's desire to accommodate its growing arts program. The design clearly represents all components of the arts program, yet maintains unity within the framework of the campus.

The 120-seat black-box studio theater is expressed as a rectangular-shaped element in the center of the arts complex. This shoebox-shaped element is restrained intentionally to provide a backdrop for all other programmatic components that are nestled into the building. Dressing rooms, costume shops and prop storage are wrapped around the edges of the box in complementary materials.

Projecting glass "strip bay" windows slice through the wrapped forms to show transparency and provide a layering of materials that is compatible with the existing campus. In some areas, window boxes are incised meticulously into the facade to accommodate focused views back to the main campus.



Barwell Road Elementary School and Community Center

Raleigh, North Carolina



Small Kane Architects, PA

Design team:
Neal Conley, AIA; Robert Williams, Associate AIA

Client:
Wake County Public School System;
Jyoti Sharma, Director of Facility Planning

Capacity:
800 (school); 1,100 (community center)

Area:
139,787 sq. ft. (total): 99,387 sq. ft. (school); 40,400 sq. ft. (community center)

Total cost:
$21.8 million (total): $13.6 million (building); $3.9 million (site); $4.3 million (community center)

Cost/square foot:
$128.05 (total): $136.84 (school); $106 (community center)

Completion:
November 2007

Photographer:
Marc Lamkin Photography

Barwell Road Elementary School shares its site and building with the adjacent Barwell Road Community Center. Pairing the two facilities provides long-needed amenities to the southeastern portion of the city, and enables the school and center to reduce duplicate systems through shared mechanical infrastructure. The shared site also made for an efficient use of land space, with less disturbed forest area, and allows student access to gymnasium facilities during school hours.

The elementary school was designed in accordance with the Triangle Region's High Performance Guidelines for sustainability. Light shelves bring daylight deep into classroom spaces, thus reducing the amount of artificial light needed. Also, by stacking the fourth/fifth-grade wings and the second/third-grade wings, the building footprint was reduced by 25 percent from a single-story design.

The 40,000-square-foot, two-story community center is integrated into the existing topography so that visitors enter the facility on the upper floor, looking down upon the two gymnasiums. The center also features north-south daylighting through translucent clerestory glazing panels.







Gustavus Adolphus College, Stadium and Hollingsworth Field

St. Peter, Minnesota









TKDA

Design team: William Armstrong, AIA; Kathryn Poore-Larson, AIA; Rich Gray, RLA	
Client: Gustavus Adolphus College; Warren Wunderlich, Physical Plant Director	
Capacity: 2,000 (home); 1,000 (visitor)	**Area:** 9,000 sq. ft. (press box, VIP area, concessions)
Total cost: $4.6 million (total, including home/visitor stadium seating, gateway, performance field and related bermed stadium bowl areas); $1.8 million (press box, VIP area, concessions)	
Cost/square foot: $200	**Completion:** September 2007
Photographers: Bergerson Photography; TKDA	

Capturing legendary game-day spirit was critical as Gustavus Adolphus College in St. Peter, Minn., planned its 3,000-seat stadium to replace the 1929 stadium. Now, spectators pass by commemorative recognition plaques en route to a central entrance plaza that overlooks the new field.

Location, orientation and timing of the new stadium were pivotal parts of the college's campus master plan. The new stadium consolidates the college's sports and recreation venues on the campus, and makes space available for a new academic campus mall at the old stadium location.

Realigned circulation strengthens campus connections and creates a dramatic bowl aesthetic with earth forms, architecture and landscaping. A tiered retaining-wall system provides lawn seating for game-day picnics and socializing.

A multi-story press box structure, home bleachers, visitors' seating and Lund Arena frame the field. Sloped glass provides spectacular views, and operable windows provide natural ventilation. The President's Suite is on the second level, and press box functions are on the third level.

Site design and architectural systems maximize the quality, function and image of the stadium within the college's budget.

University of Arkansas, Sigma Nu

Fayetteville, Arkansas



Treanor Architects, PA

Associated firm: Wittenberg, Delony and Davidson Architects

Client:
University of Arkansas; John Tolleson, Director of Development, Regional Programs

Capacity:
54

Space/student:
380 sq. ft.

Area:
20,500 sq. ft.

Total cost:
$4,573,082

Cost/square foot:
$223

Completion:
August 2007

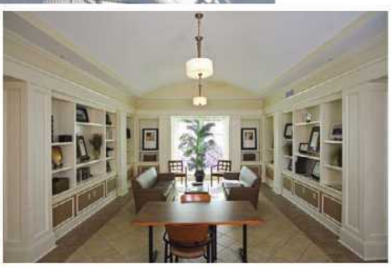
Photographer:
Janet Warlick/Camera Work

In a prime location adjacent to the university football stadium, the new Sigma Nu house architecturally supports academic and personal student growth. The 20,500-square-foot facility houses 54 men in a variety of suite arrangements, from two-person study and sleeping suites with private bathrooms and kitchenettes, to four-person suites with community bathrooms.

A large library, floor lounges and multipurpose educational support spaces facilitate small gatherings, as well as classroom presentations. All community media devices are wired to the 21st-century technology infrastructure, which is integrated with the university system.

A steep, hilly site with a complicated utility footprint dictated the form of the building. Because of these constraints, the design team created three main entrances to access the building easily: a first-floor public entrance, a third-floor campus entrance and a second-floor bicycle entrance featuring hidden bicycle storage. The team leveraged the site's elevation to give residents dynamic views of the university's stadium. The open and integrated courtyard encourages interaction and offers an idyllic spot to gather on game day.









University of Kansas Medical Center, Kansas Life Sciences Innovation Center · *Kansas City, Kansas*









Treanor Architects, PA

Client:
University of Kansas Medical Center; Ed Phillips, Vice Chancellor for Administration

Area:
205,000 sq. ft.

Total cost:
$53.2 million

Cost/square foot:
$259.51

Completion:
January 2007

Photographers:
Richard Pettus Photography; Michael Spillers/Photography for Built Environment



The Kansas Life Sciences Innovation Center occupies a prominent location on the University of Kansas Medical Center campus in Kansas City, Kan. The state-of-the-art laboratories house about 300 physicians, scientists and students, who collaborate on research that includes liver disease, reproductive sciences, neuroscience, diabetes and proteomics.

Research conducted within the center integrates biological information obtained from the study of genes and chromosomes (genomics), proteins (proteomics) and biological systems. The study of model organisms and disease models are integrated in this systems approach to biology and disease. Eighty adjoining laboratories are set up along the north side of the building; the more specialized labs are in the center where researchers can share equipment. This arrangement not only encourages collaborative team science, but also helps avoid costly duplication. The vivarium area includes a transgenic mouse facility, as well as an ABSL-3 laboratory.

The 205,000-square-foot, world-class research center was constructed below budget, and has exceeded the expectations of its users in both facilitating scientific collaboration and maintaining flexibility for future endeavors.

Rich South High School, Cafeteria Addition
Richton Park, Illinois



William E. Brazley & Associates, Ltd.

Design team: FGM, Inc., MEP; Tylk Gustafson Reckers Wilson Andrews LLC, Structural; URS Corp., Civil; J.A. Belter Associates, Kitchen Consultant; Nutrition Interior Services, Inc., Interior Design	
Client: Rich Township High School District 227; Howard Hunigan, Superintendent	
Capacity: 450	**Space/student:** 58 sq. ft.
Area: 26,000 sq. ft.	**Total cost:** $8 million
Cost/square foot: $307.69	**Completion:** July 2008
Photographers: Cedric Hampton; Erroll O'Neil	





The Rich Township High School District 227 community is expected to increase its student population over the next decade. Because of this expected growth, the district is expanding and renovating its three campuses: Rich South High School, Rich East High School and Rich Central High School.

As part of the expansion, the cafeteria addition at Rich South High School provides an auxiliary entrance into the school for the increasing student population. It also creates an environment for social gathering that has large and small dining settings. The addition is 26,000 square feet with seating capacity for more than 450 people. Flexibility in space utilization after hours also was important. The design features widescreen monitors, overhead video projection and a sound system. The addition is composed of the main dining hall, faculty dining, honor student dining and a state-of-the-art food-preparation area.

Another important objective of the design was to embrace the existing circular memorial. The architect created an open and inviting plaza as a focal point where the southeast corner exterior wall culminates into a reflective quarter circle. The memorial plaza is defined further inside the main dining hall by the layout of the ceiling, flooring and seating arrangement, which radiate from the southeast corner.

To foster a sense of pride and ownership among students and faculty, consultants conducted focus-group sessions to help define the food-court concept for the cafeteria. The result is a vibrant array of colors and inspirational images. The variety of seating styles and arrangements are conducive to positive student interaction in today's education environment.




WISDOM




DEDICATION


Faith



SPECIALIZED FACILITY

Morris-Union Jointure Commission, Developmental Learning Center-Warren · *Warren, New Jersey*



USA Architects Planners + Interiors Designer, PA

Design team:	Arnaldo Untoria, Principal-in-Charge; Peter Campisano, Project Manager; Daniel Fortunato, Project Architect; Tara Dohoney, Construction Administrator
Client:	Morris-Union Jointure Commission; Kim Coleman, Superintendent
Capacity:	250
Space/student:	672 sq. ft.
Area:	168,000 sq. ft.
Total cost:	$42,021,000
Cost/square foot:	$214 (not including site development)
Completion:	May 2007









The Developmental Learning Center-Warren, a new learning facility for educating students with autism, has the look and feel of a real community. The vision was to recreate the outside world, while maintaining safety, security and structure within a self-contained, controlled environment. The design brings the world to the classroom.

"Mainstreet"—a skylighted, central corridor—is the heart and soul of the facility, complete with storefronts, canopies, clouds, a mock bank, supermarket, home-improvement center, barber shop and apartment. Along this central spine, students receive hands-on training for everyday life skills within a real-world atmosphere. A 1950s-style diner under the main atrium serves not only as a mock restaurant to develop students' social skills, but also as the faculty dining room. The facility contains a gymnasium with an elevated indoor track, health and fitness center, and two swimming pools that are developmentally appropriate for the beginner, as well as advanced swimmers, and ideal for aquatic therapy.

Occupants are sensory-sensitive; therefore, careful consideration was given to placement of natural and artificial light sources, acoustic control, thermal comfort, pleasing exterior and interior colors, and tactile surfaces.

RENOVATION/MODERNIZATION

CITATION

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"The design team used one simple gesture to achieve many things. This building gives hope to campuses that there is an opportunity for regeneration."

—2008 Jury



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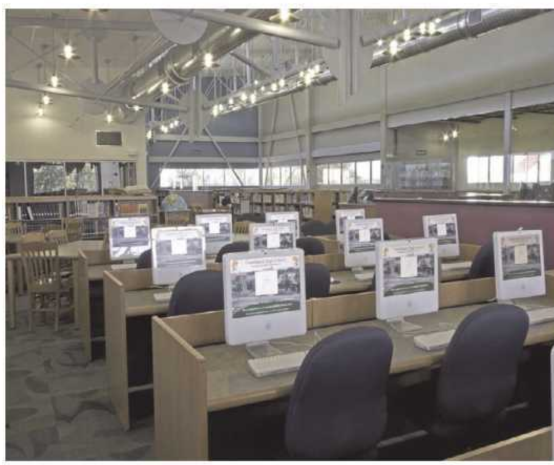
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OUTSTANDING RENOVATION/MODERNIZATION



p. 271

Northwestern College, Rowenhorst Student Center

Orange City, Iowa



Cannon Moss Brygger & Associates

Design team:
Todd Moss, AIA, Principal-in-Charge; Brent Koch, Project Manager; Michele Roseboom, LEED AP, SDID, Interior Designer

Client:
Northwestern College; Greg Christy, President

Capacity:
1,500

Space/student:
27 sq. ft.

Area:
40,166 sq. ft.

Total cost:
$4,984,628

Cost/square foot:
$124.10

Completion:
September 2007

Photographer:
Paul Brokering

Northwestern College's Rowenhorst Student Center began life as a factory. In the late '70s, it was converted to a student center. It had unique, high-quality materials and was used widely.

In the 21st century, when video games have more appeal than pool tables, and the student-center big screen has been replaced with plasma screens and personal computers, the building has been underutilized. The low ceilings, circuitous paths and dark colors made for a largely vacant and lifeless building. Even the facade was so nondescript that most people drove by not knowing the building existed.

The conversion started by creating a vibrant, colorful facade with a clear entry statement. The facade was designed to include materials and colors common to some of the college's other quality buildings.

Inside, the space was reconstructed. A simple, straight, clerestory-lighted spine was cut through the roof and the core of the building. All spaces inside were reorganized. New functions that generate more student traffic were integrated.

The building has become the antithesis of its former self. Once low, dark, circuitous and lifeless, it now is voluminous, and filled with light and student activity.





Before

"The design team used one simple gesture to achieve many things. This building gives hope to campuses that there is an opportunity for regeneration."

—2008 Jury





Camelback High School, Renovations and Additions
Phoenix, Arizona



Architectural Resource Team, Inc.

Design team:
DRW Engineering, Civil; TMAD Taylor Gaines, MPE; A Dye Design, Landscape; Hamilton Associates, Food Service

Client:
Phoenix Union High School District; Pete Garcia, Principal

Capacity:
2,500

Area:
176,143 sq. ft.

Total cost:
$28,740,494

Cost/square foot:
$163.17

Completion:
February 2008

Photographers:
Taube Photography; ART, Inc.



The "small school" concept is a districtwide design philosophy that was supported by the upgrade of this 1950s campus. The design of this project consists of two new three-story academic buildings replacing six existing two-story academic buildings. One of the buildings houses two "small schools" in 102,000 square feet. The second building contains the third "small school" and library in 68,000 square feet. Each "small school" has its own atrium and courtyard for student gatherings.

The kitchen at Camelback High School dated from the 1950s. The major remodel involved demolition and replacement of all kitchen mechanical and electrical systems, finish surfaces and partitions. The kitchen was reconfigured to conform with newer schools in the district, reducing preparation steps and speeding up the process of preparing the food and moving it to the students.

All construction was completed during the seven-week summer recess, and the cafeteria was open for business the first day of the fall semester. The vivid interior and exterior color palette was in keeping with the original school administration's request.







Before

State University of New York at Oswego, Poucher Hall Rehabilitation
Oswego, New York



Ashley McGraw Architects, PC

Design team:
Peter Larson, AIA, LEED AP, Principal-in-Charge; Bob Haley, AIA, LEED AP, Director of Design; Hyun Jun Shin, LEED AP, Architectural Designer; Diane Brandli, ASID, CID, LEED AP, Director of Interior Design; Calvin Ahn, LEED AP, Architectural Designer

Client:
SUNY Oswego; Thomas Simmonds, Associate Vice President of Facilities

Capacity:
500

Space/student:
75 sq. ft.

Area:
37,500 sq. ft.

Total cost:
$4 million

Cost/square foot:
$106.70

Completion:
December 2005

Photographer:
John Griebsch



Before



In spring 2006, Poucher Hall reopened as the new home of the modern languages and literatures department, English department and Office of Learning Services. As part of a renewal campaign to transform the heart of SUNY Oswego's campus, the architect was selected to rehabilitate this educational facility, designed and built in the 1960s, into the college's Humanities Center. Situating the humanities department at the center of the campus reinforces the college's commitment to liberal-arts education.

The rehabilitation of Poucher Hall included interior remodeling to better suit the classroom and learning needs of students. Open office and common spaces were created with wireless Internet service to encourage interaction among members of the campus community. Classrooms were renovated and upgraded to incorporate advances in teaching technology.

The renovation was designed to NYS Executive Order III, employed sustainable materials and finishes, and the HVAC system was commissioned independently.

The new interior of Poucher Hall will help enhance student life at SUNY Oswego, as well as the mission, vision and goals of the campus. Initial student responses indicated that this is the "place to be."





Harvard University, Alumni Affairs and Development Building, Conference Room · *Cambridge, Massachusetts*









Before



Beacon Architectural Associates

Design team:
Peter C. Byerly, AIA, Associate Principal; Michael R. Blasi; Cavanaugh Tocci Associates, Inc., Acoustical; CDA, Audiovisual Technology; Shawmut Design & Construction, Construction

Client:
Harvard University; Michelle Maheu, Harvard Real Estate Services, Senior Project Manager

Capacity:
35

Area:
750 sq. ft.

Completion:
April 2007

Photographers:
Lucy Chen/Lucy Chen Photography; Peter C. Byerly (before)

Harvard University's alumni affairs conference room is a state-of-the-art space providing the capability for teleconferences and video-assisted conferences for up to 35 people. It is situated centrally in the Alumni Affairs and Development Building in what had been a computer server room.

The major challenge facing the team was to create an acoustically engineered room that would perform to the standards required for audio and videoconferencing. At the same time, the space needed to have an elegant appearance. The room's mechanical system was specified and installed carefully to virtually eliminate airborne and mechanical noise.

Paintable acoustic wall panels with integrated picture and chair rails provide necessary sound absorption, and allow for the installation of rotating artwork and the uniform appearance of the walls of the room.

Furnishings were chosen to allow for various table and seating configurations so the room can accommodate small or large groups. A small built-in counter and cabinets allow for storage and coffee or beverage service.

By all accounts, the room succeeded both as the heart of the Alumni Affairs and Development Office and the video/audio center.

New Jersey Institute of Technology, Eberhardt Hall
Newark, New Jersey



Cody Eckert & Associates Architects, PA, Architect of Record and DF Gibson Architects, PC, Historic Preservation

Design team:
A&J Consulting Engineering, MEP Engineer; Harrison-Hamnett, Structural Engineer; Israel Berger & Associates, Masonry/Roofing Consultant; Thomas Balsley & Associates, Landscape Architect

Client:
New Jersey Institute of Technology; Henry Mauermeyer, Senior Vice President for Administration and Finance

Area:
34,850 sq. ft.

Total cost:
$10,050,000

Cost/square foot:
$288

Completion:
October 2005

Photographers:
George Shagawat; DF Gibson (before)

Eberhardt Hall at New Jersey Institute of Technology (NJIT) in Newark was renovated to serve as a new alumni center containing the University Alumni Club, conference center, overseers and alumni association boardroom, and offices for alumni affairs and university advancement.

The exterior is a rare and outstanding example of Elizabethan Gothic Revival style. Sound original construction, together with maintenance over the years, had left the exterior facade generally unaltered. The exterior of the building was restored as authentically as technically possible to its 1885 appearance—the year NJIT was founded.

Authentic brownstone was used to replace broken brownstone elements; custom-made brick of proper color and size replaced broken brick; and the gables and tower were rebuilt.

The interior spaces had been altered over the years, and all original finishes had been lost except for the grand stair. The date of 1889 to 1890 was determined to be the period most appropriate for the restoration and recreation of the building's interior, because the university was founded during that period.









Before


Withrow High School, Addition and Renovation

Cincinnati, Ohio



Cole + Russell Architects

Associated firm: Fanning Howey

Design team:
Richard Baldwin, Construction Administrator; Jeffrey Dodge, Project Manager; Christie Boron, Ted LeCompte, Michael Boron, Project Architects; Thomas Lindsey, Education Design Group Director

Client:
Cincinnati Public Schools; Michael Burson, Facilities Director

Capacity:
1,200

Area:
256,700 sq. ft.

Total cost:
$35,903,651

Cost/square foot:
$139.87

Completion:
December 2007

Photographer:
William Manning



Before



The renovations and additions to this multi-building campus, with buildings dating from 1919 to 1975, have restored the school's Colonial Revival architecture and updated facilities to meet state educational standards. The renovation of the existing stadium and the new sports complex, featuring a new gymnasium and locker facilities, supports on-site varsity athletic competition for the first time in more than 30 years.

The stadium field was converted from natural to artificial turf; the track was reconfigured and lengthened, and a rubberized surface was installed; the press box was moved; and lighting was replaced. The project also converted the existing gymnasium and pool facilities into the cafeteria and food-service facilities, as well as a new central mechanical systems plant. The school remained open during the entire construction process.

Withrow High School is listed on the National Register of Historic Places. The project was funded jointly by the Ohio School Facilities Commission and Cincinnati Public Schools.





Emory University, Prototype Laboratory and Research Library
Atlanta, Georgia











Before



The Emory University Prototype Laboratory and Resource Library is an interior renovation of a 30-year-old university chemistry library that was uninviting and underused. Emory University challenged the design team to use this as a pilot project to demonstrate innovations that could be used in a larger research facility.

To accomplish this goal, the architect designed the space using themes of transparency, layering and connection as metaphors for the new frontiers of research.

The project's 10,000 square feet of space are subdivided into two primary functions: a synthesis chemistry laboratory and an information resource library. Glass walls provide strong visual connections and safely segregate these zones. Interaction spaces at several scales have been incorporated into the plan, including casual huddle spaces. The "wet" synthesis chemistry laboratory features quick disconnects, relocatable chemical fume hoods and flexible laboratory furniture.

The project was designed using the USGBC LEED CI system for sustainability to qualify for a minimum of a silver rating. It is expected to meet the gold level should the project be submitted for LEED certification.

Cooper Carry, Inc.

Design team: Mark Jensen, AIA, LEED AP, Principal-in-Charge; Don Bush, AIA, LEED AP, Project Manager; Markus Wilms, AIA, LEED AP, Project Architect	
Client: Emory University; Stuart Adler, Project Manager	
Area: 10,000 sq. ft.	**Total cost:** $3 million
Cost/square foot: $300	**Completion:** February 2007
Photographers: Dave Dawson Photography; Markus Wilms/Cooper Carry (before)	

Washington Technology Magnet Middle School
St. Paul, Minnesota



Cuningham Group Architecture, PA

Design team:
Tim Dufault, AIA, LEED AP, Principal-in-Charge; Margaret Parsons, AIA, REFP, LEED AP, Project Manager; Steve Albertson, AIA, Project Architect; Darryl Pratte, AIA, LEED AP, Project Designer; Janet Dray, LEED AP, Interior Designer

Client:
St. Paul Public Schools; Patrick Quinn, AIA, REFP, Executive Director, Plant Planning and Maintenance

Capacity:	Space/student:
730	125 sq. ft.

Area:
86,000 sq. ft. (addition); 131,500 sq. ft. (renovations)

Total cost:	Cost/square foot:
$15,708,000	$129 (addition); $36 (renovations)

Completion:
September 2007

Photographers:
Dana Wheelock; Cuningham Group (exterior)

Wanting a place where technology engages students and creative learning is visible and celebrated, the district hired the architect to help bridge the gap between a 1924 masonry building cluttered by numerous additions and remodelings, and a technology-focused curriculum.

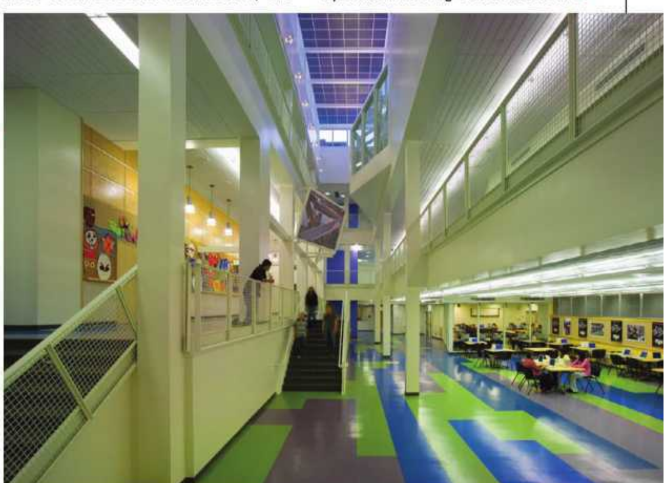
The design infused technology throughout the building and created a three-story "heart of the school" Technology Gallery addition. The technology-inspired interior is a novel and energizing contrast to the traditional exterior and much of the remaining interior. Daylighted and alive with student interaction, the dramatic space has a cyber cafe feel and serves as a gathering space and organizing source. Students interact in casual settings within the atrium and in more formal settings in adjacent project lab spaces. Teacher resource areas are organized to view the atrium and enable observation of common spaces. The openness and visibility enhance safety and security.

Challenges included the existing materials palette limiting some design options; 10 different levels created by years of renovations needing to be bridged to clarify and enhance movement, accessibility and security; and notably, the school's need to remain in operation during construction.





Before







RENOVATION/MODERNIZATION

Reading Memorial High School
Reading, Massachusetts







Before







Design Partnership of Cambridge

Design team:
David Finney, AIA, LEED AP, Principal-in-Charge; Gregg Schroeder, AIA, Educational Planner; Robert Bell, AIA, LEED AP, Project Architect; David Capaldo, AIA, LEED AP, Technical Lead; Jim Pitts, Job Captain; Ann Cuker, ASID, Interior Design

Client:
Reading Public Schools; Joseph Finigan, Principal

Capacity: 1,420	**Space/student:** 207 sq. ft.
Area: 294,627 sq. ft.	**Total cost:** $54.3 million
Cost/square foot: $184	**Completion:** January 2007

Photographer:
Ron Forth Photography Incorporated

Reading Memorial High School (opened in 1953 and expanded in 1970) needed significant upgrades to accommodate modern learning models and projected enrollment growth. The design addressed this need and incorporates tributes to those that served the country with a unique memorial wall reflecting the school's namesake.

The new plan captures a former exterior alley between existing buildings to become the primary interior circulation spine known as "Main Street." It merges indoor and outdoor qualities, providing circulation pathways, meeting places and display areas. A 900-seat auditorium ensures an optimized user experience with advanced acoustic and lighting features.

Other components of the plan include renovation of the fieldhouse—the second largest in Massachusetts—with synthetic surfaces (including basketball courts and a track), and a synthetic football/soccer field with bleachers and a press box. A lobby provides appropriate space for the existing complex and connects back to the main building via pedestrian bridge, which attaches in line with Main Street where the new three-story science and math wing was added. The addition's lower level houses a cafeteria, kitchen, receiving area and central mechanical plant.

Lincoln High School
Tacoma, Washington









Before





DLR Group

Associated firm: TCF Architecture

Design team: Craig Mason, AIA, LEED AP	
Client: Tacoma School District; Arthur O. Jarvis, Superintendent	
Capacity: 1,800	**Space/student:** 155.74 sq. ft.
Area: 280,334 sq. ft.	**Total cost:** $74.2 million
Cost/square foot: $264.68	**Completion:** September 2007
Photographer: Chris Roberts	

Steeped in history, Lincoln High School was constructed in 1913 and organized in a traditional hierarchical layout. The design team was challenged with preserving the building's historic character while adapting it to foster a new small-schools program.

Creative planning with light spatial adjustments recast the building's apparent challenges as strengths. The renovated school now is highly adaptable to change; it can support up to six distinct academies and currently operates with three, demonstrating the design's remarkable flexibility. Central to the academies is the multi-function Student Learning Center, which includes a "living room," teacher planning center and technology resource center. The academies function autonomously within the building, and shared resources promote schoolwide unity.

Architectural details and materials, including large windows, stained-glass skylights, original chalkboards and the iconic clock tower, were repaired and preserved, restoring the school's pride for the historic community while fulfilling a sustainable mission to minimize waste.

Lincoln High School's revitalization demonstrates that old and new are not mutually exclusive. When combined, the result is a dynamic, forward-thinking school enriched by a historic heritage.

Holt High School, Addition and Renovation
Wentzville, Missouri



Hoener Associates, Inc., Architects

Design team: Bruce Del, Principal-in-Charge; ASDG, LLC, Structural Engineer; McClure Engineering Associates, MEP Engineer; BAX Engineering Co., Civil Engineer	
Client: Wentzville R-IV School District; Terry Adams, Superintendent	
Capacity: 200	**Area:** 36,576 sq. ft.
Total cost: $6,683,522	**Cost/square foot:** $182.78
Completion: August 2007	

The project consists of a new 26,426-square-foot, two-story addition to the existing Holt High School building, and renovation of 10,150 square feet of the existing building. A third story will be added in the future.

The lower level of the new addition includes an extension to the existing cafeteria and kitchen, toilet rooms and one new classroom. When completed, the new cafeteria and renovation of the existing cafeteria will accommodate 500 students for each lunch shift.

The upper level of the new addition consists of six classrooms, two science laboratories, a mechanical room and toilet rooms.

The new addition also includes two stairwells and an elevator.

Included as part of this project is the renovation of the existing men's and women's locker rooms with new lockers, showers, restrooms, HVAC and offices.





Before





J. Sloat Fassett Elementary School

Elmira, New York









Before



Hunt Engineers, Architects & Land Surveyors, PC

Design team:
John Cake, AIA, Principal-in-Charge; Jeff Robbins, Project Manager; Scott Cyr, John Snyder, AIA, Xin Cui, Architectural Design; Keith Laird, CID, ASID, Interior Design; Darin Rathbun, PE, Structural Engineer; Dean Hackett, RLA, Landscape Architect; Greg Barr, PE, MEP Engineer; Chuck Dahlhaus, Electrical Design; John Gleckner, Plumbing Design; Derek McManus, Technology Design

Client:
Elmira City School District; Raymond Bryant, Superintendent

Area: 34,000 sq. ft.	**Total cost:** $7,438,678
Cost/square foot: $218.78	**Completion:** September 2006

Photographer:
Reuben Kabithe

Extensive renovations to Fassett Elementary School, which involved adding a 34,000-square-foot section behind the existing building, are part of Elmira City School District's focus on improving educational facilities for pre-kindergarten through fifth grade. Major design elements include renovated kitchen facilities and a large addition that includes music rooms, physical-education facilities and classrooms.

The former auditorium/cafeteria/gymnasium was replaced by a dedicated auditorium and cafeteria, and a new gymnasium, along with 13 new classrooms, were added. New music rooms include choral and instrumental areas as part of the new addition.

The design replaces HVAC systems, electrical service, roofs and new playgrounds, as well as a new bus dropoff area and parking facilities. The team also designed new security systems, including configurations for line-of-sight, building access control and technology.

Bradwell Institute, Phases II and III
Hinesville, Georgia



James W. Buckley and Associates, Inc.

Design team:
Craig R. Buckley, AIA, Principal-in-Charge; David J. Holton, AIA, Project Architect/Manager

Client:
Liberty County Board of Education; Cheryl Conley, Deputy Superintendent

Area:
99,190 sq. ft.

Total cost:
$12,561,800

Cost/square foot:
$126.64

Completion:
December 2007

Photographer:
Richard L. Johnson





Before

Bradwell Institute in Liberty County, Ga., stands as a beacon of pride in a school system that encompasses one of the finest military bases in the country. The original building dates to the early 1970s; although structurally sound, it no longer was able to accommodate the increasing influx of students or avoid the effects of the inevitable march of time across its visage.

The original school design centered on a courtyard concept. To create new corridors and commons, these courtyards were closed off and enclosed with high ceilings, clerestory lighting and the exposed structure of the tube steel bowstring trusses.

New life was breathed into the exterior with the addition of a clearly defined entry pavilion that leads into a brightly lighted interior with barrel-vaulted ceilings. A bus canopy and dropoff was added along with 28 classrooms, an exhibition space, weightroom, and gutting and renovation of two existing wings.

Another highlight of the project was the major kitchen overhaul. The existing food-service area was converted to a cafeteria with a stage and a glass exterior. A food court with six service lines and a top-of-the-line kitchen also was constructed.









University of Pittsburgh, Litchfield Towers Dining

Pittsburgh, Pennsylvania











Before

MacLachlan, Cornelius & Filoni, Inc.

Design team: Kenneth K. Lee, Principal-in-Charge; Steve Szczepanski, Project Manager; Kenneth Krukowski, Project Architect; John R. Cleary, Specifications Writer; Hui Chen, Intern Architect; Nicole Wargo, Drafter	
Client: University of Pittsburgh; Eli Shorak, Associate Vice Chancellor	
Capacity: 1,020	**Area:** 56,695 sq. ft.
Total cost: $10.6 million	**Cost/square foot:** $187
Completion: August 2007	**Photographer:** Denmarsh Photography

The University of Pittsburgh's Litchfield Towers Dining facility renovation transformed a traditional cafeteria (built in 1961) into a space incorporating the latest dining concepts, and provides a facility that enhances the student social and housing experience. The facility is roughly the same area as a football field. During the year before the renovation, 5,600 meals were served daily. Now, this same space serves 6,800 meals daily.

Recognizing that students prefer food variety, the university incorporated made-to-order meals and display cooking into the design. Meals no longer are prepared in the central kitchen; instead, they are prepared in the dining room at six restaurant stations plus a convenience store, a "to go" area and a Taco Bell.

A new grand entrance and atrium connect the dining facility with the lobby above. To encourage social opportunities, visual obstructions were removed, and a vista connecting the Market Place and Eddie's dining rooms was developed into Market Central.

Confined spaces were made to appear more spacious by adding skylights and windows, raising ceilings and illuminating background walls.

Constructed within the summer schedule, the dining facility has not only increased in volume, but also it has become a campus hangout.

Amesbury High School, Addition and Renovations

Amesbury, Massachusetts



Mount Vernon Group Architects, Inc.

Design team:
Engineers Design Group; Dewberry-Goodkind; Hanscomb Estimating; Marshall Gary; Geotechnical Services; WBA Associates; CCR Pyramid; Don Soule; Cavanaugh Tocci

Client:
City of Amesbury; Charles Chaurette, Superintendent

Area:
283,000 sq. ft.

Total cost:
$23.5 million

Cost/square foot:
$83.03

Completion:
August 2008

This renovation brought the existing building up to building code standards at the federal, state and local levels. Upgrades were made to mechanical, electrical and plumbing systems. Window and roof systems were replaced. Remedial repairs were made to the existing facade, and the interior of the building has all new finishes.

The new additions, totaling 54,255 square feet, consist of a science room and library, administration area, band choral and physical education.





Before





Manchester College, Union Addition and Renovation
North Manchester, Indiana





Before

MSKTD & Associates, Inc.

Design team:
James Kratzat, RA, James Dearing, RA, Principals-in-Charge; Jonathan Keck, Adam Weesner, Project Architects; Jerry Thompson, PE, Electrical Engineer; Paul Kannapel, PE, Edward Kokosa, Mechanical Design; Susan Parrish, Interior Design; Jeffrey Harless, PE, Structural Engineer; Land Plan Group, Site Design; HIS, Food-Service Planning

Client:
Manchester College; Jo Young Switzer, President

Capacity:
300 (dining commons); 450 (conference hall)

Area:
53,000 sq. ft.

Total cost:
$7.2 million

Cost/square foot:
$135

Completion:
August 2007

Photographer:
Jonah Garoutte/MSKTD

Renovation of the original 1963 Manchester College Union, which houses the only student dining on campus, required that the building keep operating during construction. The designers worked around this issue by creatively planning, staging and phasing the new additions, which were built first and isolated from the existing building and food-service operations. When the new kitchen, dining and commons became operational, the old areas were renovated to house new student-services offices and a new art gallery.

The curved glass wall of Haist Commons, a dining room and gathering space, is the most prominent addition to the building. Large open areas, balcony overlooks, and extensive use of exterior and interior glass walls help create bright, inviting spaces, connecting activity areas visually and providing views of the campus. The renovation brought the campus bookstore back into the union, allowing for combined staffing with the mailroom. The bookstore also shares a double-sided fireplace with The Oaks Lounge.

The new union has grown functionally and aesthetically, remaining a focal point of campus activities and continuing the Manchester College tradition of high-quality education environments.







North Dakota State University, Wallman Wellness Center
Fargo, North Dakota



Ohlson Lavoie Collaborative (OLC)

Associated firm: EAPC Architects Engineers

Design team:
OLC: Brian Beckler; Christell Kee, NCIDQ, Interior Designer; EAPC: Alan Dostert, AIA; Michael Murie, PE, Civil/Structural Engineer; James Tyler, PE, Mechanical Engineer; David Schmidt, PE, Electrical Engineer; Jeff Firstanau, PE, Olaf Anderson & Son, General Contractor

Client:
North Dakota State University; Gary Fisher, Director

Area: 73,000 sq. ft.	**Total cost:** $8.7 million
Cost/square foot: $116	**Completion:** September 2007

Photographer:
W.H. Kloubec/Heliostudio



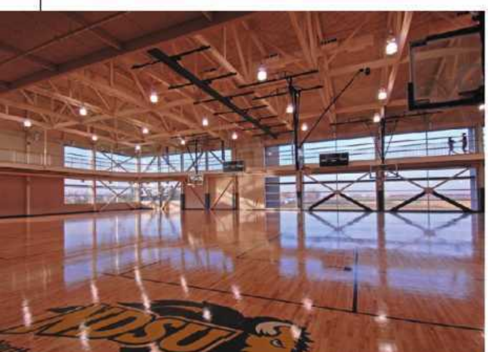
Rendering (Before)

North Dakota State University's new Wallman Wellness Center is a spacious, 73,000-square-foot facility that emphasizes added capacity with an architectural character that reflects the university's most valuable resource—its people.

The expanded facility blends seamlessly with the existing wellness center and features an array of amenities, including a three-story climbing pinnacle with a separate top-rope climbing and bouldering wall, expanded cardio areas, new circuit and free-weight space, as well as new group exercise rooms for aerobics, martial arts and spinning.

A three-court gymnasium accommodates intramurals, basketball, volleyball and badminton, and a multi-activity court (MAC) houses indoor soccer, inline hockey, basketball and tennis. Four racquetball courts, observation lounges, newly expanded and modernized locker rooms, and an elevated walk/run track situated on the mezzanine level round out the facility's added features.

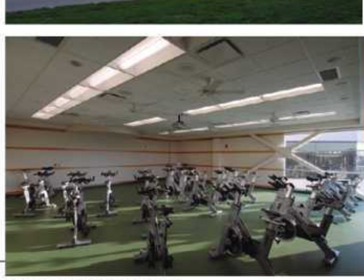
There also are larger childcare facilities, administration space, a logo shop, fitness testing, health education and massage rooms.













South Dakota State University, Wellness & Student Health Center
Brookings, South Dakota









Rendering (Before)





Ohlson Lavoie Collaborative (OLC)

Associated firm: EAPC Architects Engineers, Architect of Record

Design team:
OLC: Brian Beckler, Senior Principal; Christell Kee, NCIDQ, Courtney Haupt, NCIDQ, Interior Designers; EAPC: Donald R. Barsness, AIA; Alan D. Dostert, AIA, Project Architect; Harold Thompsen, AIA, Project Manager; Michael Murie, PE, Civil/Struct. Eng.; Paul Prout, PE, Mech. Eng.; David Schmidt, PE, Electrical Eng.; Bill Goeken, Project Manager, Sunkota Construction, Inc., General Contractor

Client:
South Dakota State University; Ruth Schroeder, Wellness Center Director

Area:	Total cost:
73,416 sq. ft.	$10.4 million
Cost/square foot:	**Completion:**
$139	August 2008

Photographer:
Ed LaCasse/LaCasse Photography

Just miles from the Minnesota border, nestled in the small, but lively town of Brookings, S.D., is South Dakota State University. As the university prepared for its fall semester, students and faculty alike were awed by the newest addition to the campus scenery—the new SDSU Wellness & Student Health Center, a stunning 73,000-square-foot facility that integrates student-health services and fitness components to support and promote healthful living among students, faculty and the surrounding community.

The newly expanded, two-level facility blends seamlessly with the existing wellness center and features an array of fitness amenities, including a three-court gymnasium with a cross-court championship court, racquetball courts, a climbing wall, elevated indoor walk/running track, cardio and weight areas, fitness floor group-exercise rooms, expanded and modernized locker rooms, a family locker room, expanded Division I varsity locker rooms and instruction facilities, conference rooms, a juice bar and logo shop. The new facility also houses the university's student health center.

The wellness center forms a centerpiece on the SDSU campus and creates a synergistic environment that encourages people to partake in a plethora of fitness and recreational activities.

Arroyo Grande High School, Campus Reconstruction
Arroyo Grande, California



Phillips Metsch Sweeney Moore Architects

Design team:
Anthony Palazzo, AIA; James E. Moore IV, AIA, LEED AP; Jared Hurley, AIA; Michael Campos; Brendan Kelly

Client:
Lucia Mar Unified School District; Deborah Flores, Superintendent; Mary Stark, Deputy Superintendent, Business; Kevin Baker, Director of Facilities

Area:
155,000 sq. ft. (campuswide)

Total cost:
$29 million

Cost/square foot:
$187 (average over six phases)

Completion:
June 2008

Photographers:
AJ Skiles; Anthony Palazzo; Lawrence Anderson



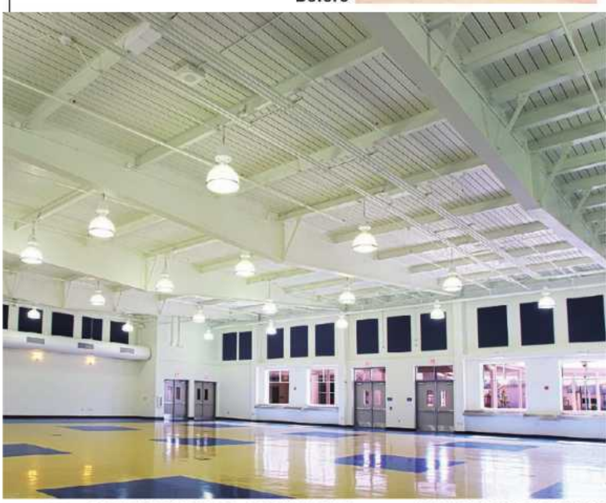
The reconstruction of Arroyo Grande High School was funded in part by a $21.5 million local bond measure and supplemented with another $7.5 million in state-matching and joint-use funds. The challenge of the master-planning phases was to evaluate almost 70 years of construction on the site.

Acting as a steward of the district's resources and trust, the architect made initial recommendations about what to modernize and what to reconstruct. The architect worked with the district's education specifications committee to build consensus and establish a priority list for each item identified that was tied to the budget.

The new construction included a 33-meter pool, student support-services building, multi-use building, food-services facility, library/media center and tennis courts. The renovation focuses on core classroom and restroom buildings, locker rooms and parking. The design mirrored the existing fabric of the neighborhood and created a sense of place by repeating design elements throughout the 63-acre campus.

The aggressive, six-phase project was completed in less than four years. The campus remained open the entire time without displacing teachers and students.


Before





University of California—Irvine, Student Center Phase 4
Irvine, California





Before



Rossetti
Design team: PCL Construction Services Inc., Contractor; John A. Martin & Associates; Melendrez; KPFF Civil Engineers; GPI Soils Engineers; Syska
Client: University of California—Irvine; Rebekah Gladson, Associate Vice Chancellor, Campus Architect
Area: 287,000 sq. ft.
Total cost: $54 million
Cost/square foot: $188.15
Completion: October 2007
Photographers: Nick Merrick; Maureen Harris; Paul Turang

The design goal was to reinforce the student center's sense of place as the town square and heart of the campus community. Project achievements include:

•Establishing a wayfinding icon for the campus, guiding pedestrian and vehicular circulation to the student center.

•Creating a place that encourages student interaction and provides facilities for student events and services.

•Building an environment that speaks to permanence of place, consistent with the architectural themes and materials used on campus.

•Building in harmony with the outdoor living opportunities of the site.

Spanning nearly 287,000 square feet, the project more than doubled the size of the original student center, with two food courts, a convenience store, a pub, triple the conference and meeting space, and a grand ballroom large enough to accommodate a crowd of 1,130. The project's "architectural metaphor" is Venice's grand plaza, with grand stairs and the placement of five towers to orient its inhabitants. The center serves as a cultural heart for the campus and reinforces the sense of community by promoting civic nature and lively interaction of students,

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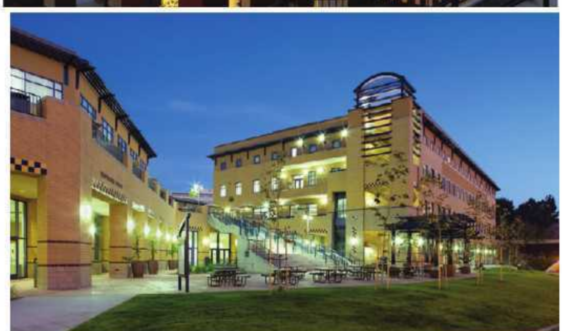
University of California—Irvine (continued)











conference participants, faculty, staff and visitors.

The materials and rich color palette complement the newer existing buildings on campus. Exterior materials consist of brick veneer with stone and precast concrete accents with some ceramic-tile accents. Specialty finishes include horizontal metal fins, and blue and gold glazed porcelain tiles to celebrate the university's collegiate colors. The project is likely to receive LEED silver certification.

The contract was awarded during one of the highest periods of cost escalation in the past two decades. Partnering and collaboration mitigated the challenges associated with cost escalation, and helped to deliver a cost-effective and high-quality environment to serve the campus.



Before


CONFERENCE CENTER


FAST FOOD COURT


ANTHILL
PUB & GRILLE


CONFERENCE CENTER



Western Kentucky University, Florence Schneider Hall, Renovation and Addition · *Bowling Green, Kentucky*











Before

RossTarrant Architects, Inc.

Design team:
Jeffrey C. Stivers, AIA, Principal-in-Charge; Illona Beresford, Project Manager; Martha Tarrant, AIA, Programming Specialist; Laith M. Ross, PE, Civil Engineer

Client:
Western Kentucky University; Julia Roberts, Director, The Center for Gifted Studies

Capacity:
122

Area:
51,432 sq. ft.

Total cost:
$10,470,000

Cost/square foot:
$204

Completion:
September 2007

Photographers:
Moberly Photography, Inc.; RossTarrant (before)

Originally constructed in 1929, this Georgian Revival-style building was once among the university's first structures. Having fallen into disrepair, the building was abandoned and vacant for several years.

To restore the historic structure, Western Kentucky University undertook a complete renovation, transforming the building into the facility that is home to the Academy of Mathematics and Sciences in Kentucky, a program offering on-campus residential accommodations for early-admission, gifted high school students with aptitudes for mathematics and science.

The new facility features student living spaces, social areas, a computer lab and collaborative learning spaces, in addition to office spaces for faculty and staff administering the program. As part of the renovation, all of the building's systems were replaced, including doors and windows; the roof; interior construction, finishes and fixtures; and mechanical, plumbing, electrical, life safety, communications, information-technology and security systems.

Purdue University, Memorial Union Dining Services Renovation
West Lafayette, Indiana



Scholer Corporation, Architect of Record

Associated firm: Mesher Shing and Associates, Design Architect

Design team:
Loftus Engineering, Inc., Electrical Engineer; Applied Engineering Services, Mechanical Engineer; Sherman Robinson, Inc., Food-Service/Kitchen Consultant

Client:
Purdue University Dining Services; Gary C. Goldberg, Director of Dining Services

Area:	Total cost:
16,000 sq. ft.	$5,071,000
Cost/square foot:	**Completion:**
$317	September 2007

Photographer:
Jon Denker/CAPS

Recently, Purdue Memorial Union Dining Services completed a $5 million, 16,000-square-foot renovation designed to provide flexible, modernized spaces for students, staff, faculty and visitors to study, dine and socialize.

Original food service in the union consisted of a ground-floor cafeteria that served 1,000 people per meal. In 1978, food-service operations in the union received their first major renovations. The result was one centralized kitchen and restaurant concept with satellite restaurants scattered throughout the ground floor. As new concepts in campus dining facilities emerged, students began to desire a more modern, flexible dining experience.

Designers had to give careful consideration to materials, space sizes, colors, equipment, furniture, signage and lighting. Perhaps the greatest challenge was maintaining the historical fabric of the facility, while creating a lively, flexible and contemporary dining atmosphere.

Renovated spaces now contain six separate, culturally diverse restaurants situated around a central "streetscape:" Villa Italian Kitchen, La Salsa, Flatbreads, Zoia Juice Bar, Urban Market and Lemongrass.





Before





Lynn Road Elementary School
Raleigh, North Carolina







Before



Skinner Lamm & Highsmith Architects

Design team: William T. Highsmith, AIA, LEED AP, Principal-in-Charge; Blake Faulkner, AIA, Project Architect; Mary Kathryn Washington, ASID, Interior Designer; Ben Skinner, CSI, Construction Administrator; Jerry Harrison, William Daughtridge, CAD Designers	
Client: Wake County Public School System; Del Burns, Superintendent	
Capacity: 685	**Space/student:** 142 sq. ft.
Area: 97,581 sq. ft.	**Total cost:** $19,365,000
Cost/square foot: $198	**Completion:** August 2008
Photographer: Brad Farlow	

The original building, constructed in the mid-1970s, required extensive interior renovation to meet the current program standard, which increased enrollment from 481 to 655 students. In that effort, focus upon increasing existing teaching-area efficiency enabled an increase in the number of designated spaces from 31 to 40.

A new administrative wing links a formerly detached gymnasium to the main building, and serves as the point of entry for students arriving by car and for the public. The exterior entrance intentionally was designed to be perceived as the new "front door" to this facility.

Other improvements to this campus include adding a car-queuing loop to eliminate potential for traffic congestion along Lynn Road, replacing most single-fixture toilet rooms within classrooms with corridor-accessed group facilities; and replacing major building systems, as well as food-preparation equipment.

By installing sprinklers throughout the facility, the school avoided a potential tree-eliminating fire apparatus encirclement road. Thus, the essential character of the existing landscape was maintained, much to the delight of staff and neighbors.



Medical College of Georgia, Auditoria Center Renovation
Augusta, Georgia









Before





Studio 3 Design Group, PC

Design team:
Richard Hinman, AIA, Principal-in-Charge; Anca Lipan, Project Architect; Paul Sandifer, Project Manager; Sela Filipovic, Project Designer; Michelle Pieper, Interior Designer; Electrical Design Consultants, Electrical Engineer; Ingenium Consulting, Inc., Mechanical/Structural Engineer

Client:
Medical College of Georgia; Daniel W. Rahn, President

Capacity: 450	**Area:** 8,970 sq. ft.
Total cost: $1,172,000	**Cost/square foot:** $130.67
Completion: April 2008	**Photographer:** Fred Martin Jr.

The Auditoria Center, situated in the core of the Medical College of Georgia's campus, serves as a hub for special events for the college and surrounding community. The renovation was made possible by the donation of Natalie Lee in honor of her late husband, Lansing B. Lee Jr.

The center was built in 1953 and had undergone partial renovations in the 1980s. The new 8,970-square-foot renovation includes a redesigned entrance, lobby, conference room, restrooms and auditorium.

The original corridor was widened to serve as a lobby and a new storefront entrance, and skylights were added to flood the space with natural light. A conference room was created where the old restrooms were, and new, accessible restrooms were created in the old mailroom space. The large auditorium, which had been untouched since 1953, now features an undulating "cloud" ceiling, and a mix of reflective and absorptive panels on the walls to enhance the acoustics of the space.

All of the finish materials throughout the space were updated with green products: cork was used on the stage and under the seats, recycled content tile was used in the lobby and restrooms, and recyclable carpet tile was used in the conference room and auditorium.

Birmingham Elementary School Upgrades

Birmingham, Michigan



TMP Associates, Inc.

Design team: John Castellana, FAIA, REFP, Project Executive; John Miliacca, AIA, Project Manager; Gary Jelin, AIA, Principal Designer; Dave Warren, AIA, Project Architect; Drew Pennington, ASID, Andrea Angers, IIDA, Interior Designers; Sam Tavernit, PE, Ranjit Nandwana, PE, Structural Engineers; Beckett & Raeder, Civil Engineer; Peter Basso Associates, Mechanical/Electrical Engineer	
Client: Birmingham Public Schools; David Larson, Superintendent	
Capacity: 2,800 (four buildings)	**Space/student:** 93 sq. ft.
Area: 259,543 sq. ft. (four buildings)	
Total cost: $29,711,999 (four buildings)	
Cost/square foot: $114	**Completion:** December 2007
Photographer: Christopher Lark Photography	

Four elementary schools within Birmingham Public Schools had substantial disparity relating to their educational appropriateness and amenities. Upgrades were necessary to achieve equitable opportunities for all students, but stakeholders agreed that the unique character and personality of each school needed to be preserved.

The architect assisted the district in 1997 with master-planning studies for replacement or remodeling of the four schools. Media center additions were done as Phase I initiatives at the schools. In 2003, the district passed another proposal to complete the master plan. To complement the prior additions, the schools were "replaced" around their existing media centers. A financial analysis determined that the replacement option saved the district more than $1 million compared with remodeling alternatives.

To maintain equity, the architect developed a "kit of parts" to define and standardize program ingredients, both for size and amenities. The next task involved manipulating the kit of parts at each school to create unique learning environments for children.

These projects helped redefine Birmingham School's elementary program. The final products are four elementary schools that have equitable ingredients and amenities, all with distinct personalities that reinforce the legacy and traditions of the original schools.



Before







Hazelwood East Middle School, Conversion Phase I and II

St. Louis, Missouri









Before

TR,i Architects

Design team:
Curtis Cassel, AIA, Project Director; Brad Johnson, Project Architect; Craig Veile, AIA, LEED, Project Designer; Carey Edwards, RA, Dane Tippett, Construction Administration

Client:
Hazelwood School District; Chris Wright, Superintendent

Area:
134,421 sq. ft.

Total cost:
$2,705,583

Cost/square foot:
$20.13

Completion:
September 2007

Photographer:
Peter Wilson

This project's philosophy: Eliminate outdated green tile throughout the school; brighten the dark, lifeless corridors; bring outdated learning spaces into the 21st century; and restore stimulation of students in dynamic libraries. Revival of school pride and identity can happen to aging facilities, and schools can be transformed.

The story is familiar; the solution is unique.

Built and expanded over decades, this school has had many faces. Originally built as a high school, it was expanded to include a junior high. As the population grew, the high school was moved, and the entire facility served junior high education only. Over time, the junior high began to operate as a middle school. Ultimately, the middle school ran within a departmentalized high school. Functionally, it needed total reorganization.

Each expansion was completed with incongruent materials. Colors and image were not consistent. Quality and finishes were mismatched. Orientation was confusing. It truly was a calico-appearing school.

Classrooms were updated and organized into houses. Through creative application of uniform, durable finish materials with contemporary flair, identity and pride were restored, and a true middle school conversion occurred.



Lehigh University, Lamberton Hall
Bethlehem, Pennsylvania



USA Architects Planners + Interiors Designer, PA

Design team:
Paul Swartz, Principal-in-Charge/Project Manager; Mitch Miller, Project Architect; Tim Schell, Construction Administrator

Client:
Lehigh University; Anthony Corallo, Associate Vice President of Facilities, Planning and Renovations

Capacity:
200 (seating)

Space/student:
125 sq. ft.

Area:
25,000 sq. ft.

Total cost:
$4 million

Cost/square foot:
$160

Completion:
March 2006



Lamberton Hall, designed by Frank Furness in 1906, served as the student dining hall until falling into disrepair in the 1950s. Over the next three decades, Lamberton deteriorated, severely limiting its functionality.

Seeing a "diamond in the rough," student government took ownership of the building, envisioning a facility that would be used as a small performance venue and an intimate gathering space on campus. Lamberton Hall was to become the "students'" student center.

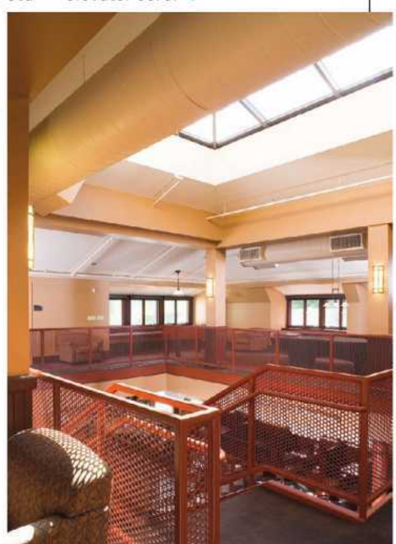
The architect, in collaboration with the university's team of students, faculty and staff, designed the rehabilitation and renovation of about 21,000 square feet within Lamberton Hall and a 5,000-square-foot addition. Restoring much of the original design, the great room remained as a multipurpose space and entertainment venue accommodating 200 to 300 students with a mezzanine area for lounge games and small meeting rooms, as well as an all-night "greasy spoon."

The addition, constructed of new glass and wood, serves as the entrance to Lamberton and houses the kitchen, servery, new stairs and elevator core.





Before



WORK IN PROGRESS

CITATION

Little
Surry Community College, North Carolina
Center for Viticulture & Enology
Dobson, North Carolina .... p. 301



"We liked the design process—it started with the understanding of the art and science of what the school is teaching, and the fundamentals of that were understood by the architect."

—2008 Jury



OUTSTANDING WORK IN PROGRESS



p.313



p.318

Surry Community College, North Carolina Center for Viticulture & Enology · *Dobson, North Carolina*





"We liked the design process—it started with the understanding of the art and science of what the school is teaching, and the fundamentals of that were understood by the architect. The building mimics a vineyard without being too literal."

—2008 Jury





Little

Design team:
Bronald Johnson, Jim Williams, Tomas Eliaeson, Kelly Beaver, Daniel Wray, Greg Brown, Jenny Sigmond, Jeff Cox; Scott Miller, Miller Landscape; Paul Fidishun, Miller Landscape

Client:
Surry Community College; Gary Carson Tilley, Executive Vice President/ Chief Financial Officer

Area: 16,354 sq. ft.	**Total cost:** $4.2 million
Cost/square foot: $257	**Completion:** July 2010

The North Carolina Center for Viticulture & Enology facility will serve as a catalyst for the state's burgeoning wine industry. The facility addresses Surry Community College's need to become the gateway to the North Carolina wine country by providing a center that accommodates wine-industry events and houses a state-of-the-art, commercially bonded and student-run winery that will serve as a teaching laboratory and demonstration model for the wine industry. The center will position Surry Community College to better partner with community colleges and universities across North Carolina to meet the needs of this diverse industry.

The building site creates a new gateway to the campus and a physical connection to surrounding buildings. Intended to be the first phase of a larger facility, which eventually will include a performing-arts program, this project will house a crush pad, fermentation and processing facilities, temperature-controlled barrel storage, lab and testing spaces, classrooms, faculty offices, a library, and a grand meeting hall for college and community events. The grand hall will accommodate up to 250 seats for seminars, lectures and dining.

Man's relationship with nature through agriculture influenced the facility's design. This quest to organize and control the land is expressed in the 24-foot structural rhythm running the length of the facility. Additionally, the building is programmatically separated in two zones: the academic and processing facilities representing enology/science (i.e. controlled temperature, humidity, pressure, time), which is rendered with a precise brick module behind a strict structural order; and the grand hall (amphora) representing viticulture/nature (uncertainty of weather patterns) designed as a permeable glass box, allowing a seamless connection to the outdoors (the lawn) and displaying ever-changing daylighting patterns.

Charlotte School of Law
Charlotte, North Carolina



Construction



Rendering



Construction

ai Design Group Inc., Interior Architecture/ Designer

Associated firm: LS3P Associates

Design team:
Matrix Real Estate Services, Project Manager; LTD, Core/Shell Architect; J.F. Schultze Construction, General Contractor

Client:
Charlotte School of Law; Eugene Clark, Dean

Capacity:
500 students (including 160 future)

Space/student:
200 sq. ft.

Area:
100,000 sq. ft. (32,000 sq. ft. future use)

Total cost:
$15 million (interior and exterior)

Cost/square foot:
$150

Completion:
July 2008

Attracting applicants from all over the United States, Charlotte School of Law is the first American Bar Association-approved law school in North Carolina's most populous city. In June 2007, a permanent location for the school was chosen next to historic Bryant Park—one of the gateways to Charlotte's Center City District. The central location, close to Uptown Charlotte and accessible to the area's interstate system, puts all of Charlotte's amenities in easy reach of students, as well as the community that uses the law library.

The design intent of the project was to create exceptional architecture, revitalize green space and maximize center city views on this space. The development challenges on the urban infill site included brownfield land, excessive grades and frontage along an intense vehicular corridor.

Designed using a precast concrete and metal-panel exterior, the building encompasses upgraded, high-performance, low-E glazed windows. The mechanical systems include a package rooftop HVAC system that operates on direct-digital-control (DDC) technology.

Using concrete slab foundations on steel and wood piles and steel-braced frame construction, the four-story law school includes nine classrooms, two knowledge bars, a fully functional courtroom, eight bathrooms, two elevators, 62 offices and a 24,000-square-foot library. In order for the school to accommodate the library structurally, the second floor was built on-grade with a reinforcing slab to support high-density shelving.



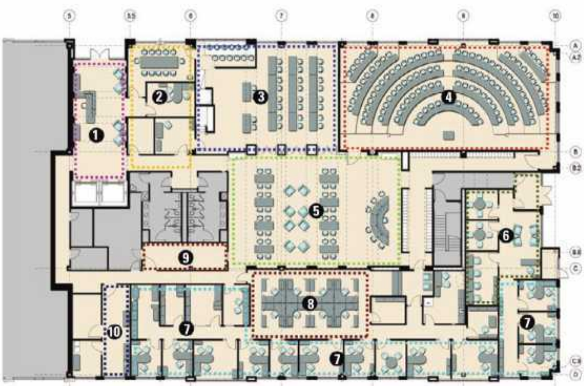
Rendering



Construction



Site plan



First floor

LEGEND
1. Entry/Reception area
2. Courtroom supp./Judge and jury chambers
3. Courtroom
4. Classroom
5. Community learning/Knowledge bar
6. Community outreach clinic
7. Administrative offices
8. Open office area
9. Bookstore
10. Mailroom

"At Charlotte School of Law, we believe in collaboration and a focus on sound process and top results. Working closely with the AI team, we found all of this and more. Our students, faculty, staff and the profession are delighted with our new facilities."

— E. Eugene (Gene) Clark, Dean and Professor of Law



Construction

Union County Middle & High School "D" Prototype
Indian Trail, North Carolina



ADW Architects, pa

Design team: Jim Powell, AIA; Thomas Carlson-Reddig, AIA; Michael Esposito, RA; Michael Lovaglio, RA; Rob Woodruff, RA; Danielle Dallaire	
Client: Union County Schools; Donald Hughes, Director of Facilities	
Capacity: 2,800 (total): 1,600 (high school); 1,200 (middle school)	
Space/student: 142.86 sq. ft.	**Area:** 400,000 sq. ft.
Total cost: $68 million	**Cost/square foot:** $170
Completion: July 2010	**Photographer:** Sean Busher (rendering)

The architect was hired to re-evaluate the existing Union County Public Middle School and High School, and generate a new, enhanced prototype. Through a design charrette process, designers, engineers and Union County school staff collaborated to define program and design direction over the initial three weeks, thus consolidating the design schedule.

The result is a new design that is more sustainable and site-adaptable. The interior environment has flexible learning spaces and uses daylighting strategies. The consolidated plan of the middle and high schools saves upfront costs and reduces the exterior building envelope, also saving operating costs. A system of classroom pods oriented east-west, interconnected with commons areas, permits minimal disturbance on any given site, as well as provides the flexibility to orient learning spaces to take advantage of the sun's daily path for daylighting and passive-solar heating opportunities.

The central component of the design is a commons area, serving the school and the local community, and providing the area's residents with a sense of ownership and pride.

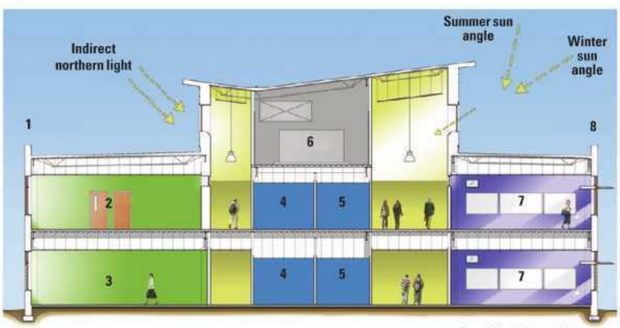


Site plan



First floor

LEGEND
- HS classroom
- HS tech/support
- HS admin/guidance/office
- MS classroom
- MS tech/support
- MS admin/guidance/office
- Gyms/Multipurpose
- Cafeteria/Kitchen
- Bath/Lockers/Service/Storage



Daylighting diagram

LEGEND
1. North facade
2. Biology lab
3. Consumer science
4. Break
5. Conference
6. Mezzanine
7. Classroom
8. South facade

Seminole Community College, SCC-UCF University Partnership Center · *Sanford, Florida*



Harvard Jolly, Inc.

Design team:
Ward Friszolowski, AIA, Project Executive; Philip Trezza, AIA, LEED AP, Project Architect; Stephen Johnson, AIA, LEED AP, Project Designer; Jacquelyn Spears, ASID, LEED AP, Interior Design; Jim Clees, RLA, ASLA, Landscape Architect

Client:
Seminole Community College; Adie Price, Director of Facilities

Area:
106,825 sq. ft.

Total cost:
$25,618,665

Cost/square foot:
$239.82

Completion:
February 2010



The new SCC-UCF University Partnership Center will be a joint-use classroom and library building on the Sanford/Lake Mary Campus of Seminole Community College. The facility will be shared by Seminole Community College and the University of Central Florida. This 106,825-square-foot building will include space for:

- General-purpose classrooms.
- High-technology classrooms suitable for distance learning and computer-mediated instruction.
- Faculty offices.
- Student-services areas.
- Library areas will include learning support spaces and an information commons composed of open computer labs, instructional audiovisual support, reference materials and traditional library services.

Construction is scheduled to be completed in February 2010.





Dallas County Community College District, Cedar Valley College, Science/Veterinary Technology/Allied Health Building

Dallas, Texas



HOK	
Design team: Steven Janeway, AIA; Javier Espinoza, AIA; Kirk Millican, AIA; Gene Warren, AIA; Tom Roessler, AIA; Dena Walter, Farzine Hakimi, Robert Gonzales, Juan Carlos Arias, Mike Preston, Randy Mao	
Client: Dallas County Community College District; Jennifer Wimbish, President	
Area: 110,000 sq. ft.	**Total cost:** $30,000,000 (estimate)
Cost/square foot: $272	**Completion:** November 2009



Dallas County Community College District selected the architect to design a 110,000-square-foot Science/Veterinary Technology/Allied Health (S/VT/AH) building for its Cedar Valley College (CVC) campus. Beyond serving the educational needs programmed, the facility was intended to bring together diverse portions of the campus, demonstrate a commitment to sustainable design, and function as a gateway to the existing campus core.

The project scope called for a new campus master plan. The campus plan had not been updated since its conception in the mid-1970s and did not adequately provide for new facilities. The new campus plan provides for planned construction through the year 2021.

The functional program for the S/VT/AH building identified science laboratories, lecture halls, healthcare training facilities, spaces necessary to support comprehensive veterinary technology training, plus a major outdoor education center to support archeology, geology and environmental-science programs. Three standard lab modules of increasing size with flexible interior layouts will support the facility's science mission in chemistry, biology, physics, astronomy, forensics, environmental science, archaeology and geology.

The sweeping length of the floor plan connects existing veterinary support buildings at one end with links to the campus core at the other. The design draws students from the parking lot into the central atrium midway along its arc, and from the campus core through the outdoor education center into student interactive spaces. These connective circulation/gathering spaces feature displays of the science taking place within and provide student lounges that benefit from the natural light.

The design's exterior materials recall the brick and curtainwall vocabulary of the overall campus, but promote a lighter, more open envelope suited to the overall sustainable LEED silver design incorporating daylight, shading, reduced infiltration and recycled content.



Section elevation through lecture halls and lab spaces



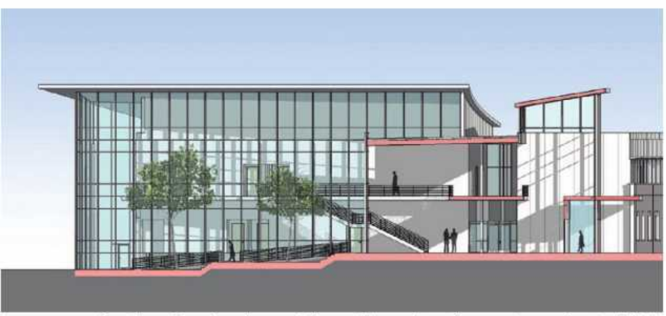


Site plan



"We are proud of our new science building because it utilizes the latest technology that is critical to student learning. In addition, the building is designed with the most efficient resources, enabling us to live our 'green' and sustainable principles."

— Jennifer Wimbish, President



Section elevation through the outdoor education center and entry lobby

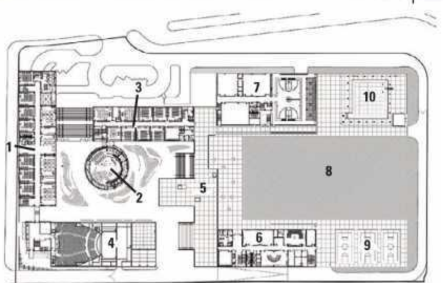


High School for the Visual and Performing Arts

Los Angeles, California







Site plan

LEGEND

1. Art building
2. Library
3. Administration/Dance building
4. Theater
5. Cafeteria (below)
6. Music building
7. Parking garage/Gymnasium
8. Playing fields
9. Basketball/hard courts
10. Pool



HMC Architects

Associated firm: Coop Himmelb(l)au, Designer of Record

Design team: Gary Gidcumb, Principal-in-Charge	
Client: Los Angeles Unified School District; Joseph Mehula, Chief Facilities Executive	
Capacity: 1,800	**Space/student** 132 sq. ft.
Area: 238,000 sq. ft.	**Total cost:** $170,884,000
Cost/square foot: $718	**Completion:** September 2009

The High School for the Visual and Performing Arts is part of a wave of construction revitalizing downtown Los Angeles. Situated within the Grand Avenue cultural corridor, the school is adjacent to the Colburn School of Performing Arts, the Museum of Contemporary Art and Walt Disney Concert Hall. In perhaps the most structured use of the small learning community (SLC) academic model, 1,800 students will participate in general academic classes and arts-specific curricula in music, dance, visual arts or performing arts.

To enhance community involvement, presentation spaces and a 950-seat theater are open to the public. A ceremonial staircase leads to a crystalline lobby, welcoming visitors to the theater and exhibition space. To enhance security, public access is at pedestrian grade, and classroom facilities are above street level. The design preserves the urban edge of Los Angeles, yet creates a protected interior space dedicated to innovative student education.

Despite large, volumetric spaces, the school will garner 41 Collaborative for High Performance Schools (CHPS) points for sustainability features.

University of New Hampshire, Southeast Residential Community
Durham, New Hampshire





JSA Inc.

Design team:
North Sturtevant, CSI, Principal; Mark Moeller, AIA, LEED AP, Design Principal; Lorianne Smith, AIA, Project Manager; Dawn Markowitz, IIDA, Interior Design; Mike Adams, AIA, Director of Quality Assurance and Cost Control

Client:
University of New Hampshire; Doug Bencks, University Architect/Director of Campus Planning

Capacity: 728 beds	**Space/student:** 260 sq. ft.
Area: 189,607 sq. ft.	**Total cost:** $32 million
Cost/square foot: $168.77	**Completion:** August 2008

Photographers:
David Maurand; JSA (rendering)

In response to housing needs, the architect developed a phased residential master plan for 1,450 new beds on 15 acres in the southeast quadrant of the University of New Hampshire's campus. The university's campus character is a blend of three distinct images: a quintessential New England college campus, a village and a native landscape.

In order to facilitate phased development, and to keep the scale of the buildings consistent with the existing context, the final plan proposes a series of six buildings clustered around various-sized courtyards, promenades and outdoor activity areas.

In phase I, two of the new residence halls abut an existing family-housing cluster; thus, clear definition of outdoor space and circulation was essential. In phase II, a mix of four- and six-bed suites, and traditional double rooms form the core of the third residence hall.

Ultimately, with the completion of all phases, the residential community will include a small amphitheater, walking/biking paths, a waterfront park and a full-size basketball court.

Environmental sustainability has been a key consideration in the development of the site.







Warsaw Community Schools, New Prototype Elementary School: Leesburg Elementary School and Madison Elementary School

Leesburg, Indiana and Warsaw, Indiana









Rear gymnasium entry



Suffering from a lack of educational space, Warsaw Community Schools is embarking on a master plan to reshape its outdated and outmoded facilities. The two new elementary schools in the first phase use a creative prototype plan to provide equity in educational space, programming and opportunity to students of the various communities. The innovative plan was developed in close partnership with teachers, administrators, staff, students and community members who will use it everyday.

The building is designed to rethink the paradigm of traditional school layouts and address the challenge of today's programmatic needs. The four-section school is parted into halves for better teaming opportunities; primary (kindergarten/pre-K to 2) on one side and intermediate (grades 3 to 6) on the other. Each half is split further into wings, dedicated to grade levels working closely with one another. The wings on each side are joined by special-services classrooms serving the primary and intermediate needs respectively. This addresses the realistic challenges of "pullout" programs, and the need for localized teaming and cooperation of staff and students. The plan also incorporates security measures of localized partitioning and restricted access to the building, while allowing for enhanced visual monitoring and control of interior and exterior spaces.

The use of timeless local materials of brick and stone provides a low-maintenance facility and creates a sense of permanence and stability in the community of which they are a part. Materials also were selected to provide an elegant, yet affordable solution to a large facility. The building's massing and aesthetics provide a balance of function, form, scale, purpose, hierarchy and arrival. Other ideas such as white roofs, sustainable and durable materials, and use of site amenities and wetlands add to the sensibility of the projects.

Kovert Hawkins Architects, Inc.

Associated firms: F&G Engineers, MEP; Slesser Engineering, Structural; Bob Isgrigg & Associates, Civil

Design team:
James C. Lake, AIA, CSI, Principal/Architect; Hal E. Kovert, AIA, Principal/Architect; Heather Graninger, AIA, Architect; Brendan Brown, Associate AIA, Architectural Design; Amanda Foley, KYCID, IIDA, Interior Designer; Heather Gilbertson, Interior Designer; Matt Gullo, Associate ASLA, Associate APA, Landscape Architecture/Planning; Donal Neal, Educational Consultant

Client:
Warsaw Community Schools; Robert Haworth, Superintendent

Capacity:
700

Space/student:
141 sq. ft.

Area:
98,920 sq. ft.

Total cost:
$15 million (building/sitework per building)

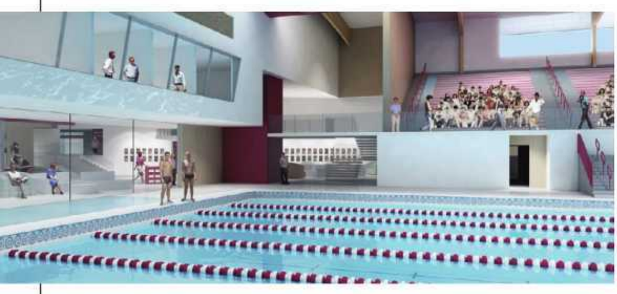
Cost/square foot:
$151.64

Completion:
August 2010

Jenks Public Schools, Natatorium Complex
Jenks, Oklahoma









KSQ Architects, PC

Associated firm: SHW Architects

Design team:
David Short, Garret Krishan, Chester Ehrig, Marcus Fairless, Linda Kress

Client:
Jenks Public Schools; Ben Ferem, Executive Administrator (Building and Construction)

Capacity:
1,500

Area:
46,358 sq. ft.

Total cost:
$19,657,918

Cost/square foot:
$424.05

Completion:
2012

Photographers:
Garrett Krishan; Skyline

Jenks Public School District is renovating its existing pool facility and adding a 50-meter competition pool with 1,500 spectator seats. When completed, the new facility also will function as a community-based anchor for local recreational programs. The grand entrance plaza is sized to receive large groups graciously. Approaching the facility, visitors and competitors are confronted with the thrill of events taking place in the lobby, lounge and pool through an expansive glass wall. The lobby also features a sculptural theme that unites water with the school's mascot, the Trojan warrior, by depicting the warrior emerging from a pool of water.

Ribbed aluminum panels and brick fit well with the existing campus buildings while asserting the complex's prominence as a community anchor and a regional athletic draw. Ceramic and porcelain-tile floors and walls were selected to withstand the corrosive pool environment. Curved, laminated wood beams telegraph the building's wave-like shape to the interior. Overlooking the pool on the second floor are the coaches' and administrative offices, and spectator seating, which also bridges to the spectator seating of the existing pool.

Hampton University, Student Dining Facility and Activity Hall
Hampton, Virginia



LEGEND
1. Residence hall
2. Proposed dining facility
3. School of Journalism

Site plan

The Livas Group Architects, PC

Design team:
MSA, PC, Civil; McPherson Design Group, PC, Structural; Pease Associates, MEP/FP; Hillsman & Associates, Interiors; Faassen & Associates, Inc., Kitchen; CDC, Inc., Curtainwall; McCallum Testing, Geotechnical; Warren M. Smith & Sons, Inc., Estimator; Schrager Lighting Design, LLC, Lighting; Ambassador Enterprises, Inc., Audio/Video

Client:
Hampton University; William R. Harvey, President

Capacity: 1,200 (student dining); 1,000 (activity hall)	**Space/student:** 12 sq. ft.
Area: 100,000 sq. ft.	**Total cost:** $25 million
Cost/square foot: $250	**Completion:** September 2010

The Student Dining Facility and Activity Hall will serve as an institutional focal point that will be situated on the shoreline of the Hampton River on the Hampton University campus overlooking downtown.

The three-story, 100,000-square-foot facility will house two dining halls: one for students, which will seat 1,200, and another for special university dining and entertainment events, which will seat 1,000. Each dining hall will have its own lobby and full-service kitchen. The student dining hall will be housed on two levels, with the second floor set back from the main facade to create a two-story atrium along the waterfront. The main floor will be a central dining area with food-court service around the perimeter and private dining/meeting rooms to accommodate small- to medium-sized groups. The design also will include exterior eating areas.

The university's special dining and activity hall, which can be divided in half for smaller groups, will be housed on the third floor and will have its own lobby, coat room, restroom and exterior terrace. To maximize the benefit of its prime waterfront location, the building will be designed to accommodate views to downtown Hampton through a three-story convex glass curtainwall that will run the length of the building.

Student access to the facility will be on the street side of the building, which will have its own entry plaza and colonnade. The major building materials will be brick, precast concrete and glass.







Oxnard College, Performing Arts Classroom and Auditorium

Oxnard, California



MVE Institutional, Inc.	
Design team: Robert Simons, AIA, Partner-in-Charge; Mel Tan, AIA, Project Lead Designer; William Koster, AIA, NCARB, LEED AP, Director of Technical Services; Doug Brown, Project Architect; Nathan Herrero, LEED AP, Project Designer	
Client: Ventura County Community College District; James Meznek, Chancellor	
Capacity: 400 (auditorium); 100 (black-box theater)	
Area: 26,500 sq. ft.	**Total cost:** $18.5 million (building/sitework)
Cost/square foot: $560.22 (building only)	**Completion:** October 2009
Photographer: Myon Lee (renderings)	

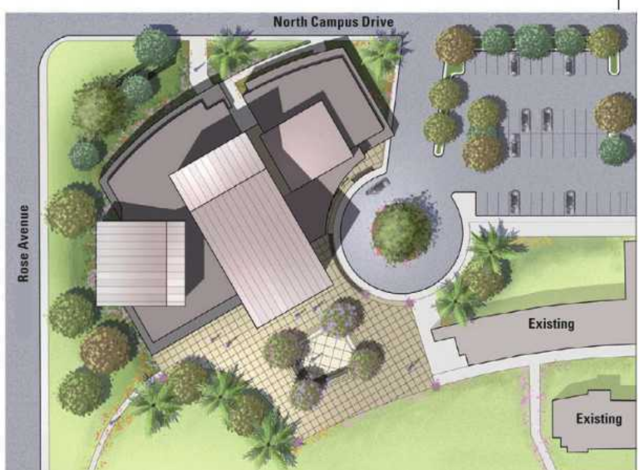


The Oxnard College Performing Arts Classroom and Auditorium complex will be the new home for the performing-arts program and Oxnard College Television. This new multi-use complex will be the college's largest-capacity lecture hall and auditorium space. It also will serve as a major campus design statement and community icon because of its prominent location.

The team held a series of workshops and design charettes, soliciting input from campus users and specialty consultants. Both the 400-seat auditorium and 100-seat black-box theater will accommodate a wide spectrum of uses. Additional classrooms and support spaces are designed to consolidate various programs that are relevant to the program.

The design of the complex complements and enhances the interior campus green spaces, and is sensitive to the other existing and newly planned buildings. The thoughtfully designed outdoor plaza and its relationship with adjacent and future buildings serve to create a distinguishable centralized "Courtyard for the Arts." The rotated forms, differing heights and butterfly roofs create a powerful image facing the street.





Site plan



South elevation

Chaffey College, Physical Education Facility
Rancho Cucamonga, California









Chaffey College has struggled to keep up with population growth over the past decade.

Its existing gymnasium is sorely undersized and needs many improvements. The new physical-education project will create an inspired architectural environment that fosters innovation while supporting the college's functional needs.

First, a new gymnasium and fitness room will be built that will serve multiple tasks. Second, the existing gymnasium complex will be remodeled to suit the current program, simplify circulation and bring the building up-to-date. The public space created between the two buildings and the main street will serve as a student link to the main area of the campus and create a large pre-/post-game plaza during tournaments. Monumental stairs, ramps and an elevator will be incorporated to facilitate major grade changes and create the edges of the plaza.

A large entry overhang will connect the new facility with the existing and create a visual gateway to a second lower plaza for athletic staff. A large sign along the street will serve as a marquee.

NTD Architecture

Design team:
Godwin Osifeso, AIA, Principal;
Larry Buoncristiani, RA, Studio Director;
Jeffery Graden, Project Architect;
Jens Lerback, RA, Senior Designer

Client:
Chaffey Community College; Steve Menzel, Vice President, Administrative Services

Capacity:
1,000 seats (new gym)

Area:
22,113 sq. ft. (new); 45,263 sq. ft. (remodel)

Total cost:
$10,530,000 (new); $3,956,000 (remodel)

Cost/square foot:
$465 (new); $87 (remodel)

Completion:
August 2011

Photographer:
Jens Lerback

College of Sequoias, Tulare Center for Agriculture and Technology, Phase I · *Tulare, California*



NTD Architecture

Design team:
Jay R. Tittle, Principal; Stephen R. Hoskins, Design Principal; Shoji Takeshima, Studio Director; Yao Chien Lee, Project Leader; Araceli Gomez, Designer

Client:
College of Sequoias Community College District; Eric Mittlestead, Dean/Director of Facilities & Facilities Planning

Capacity:
10,000 students

Area:
85,957 sq. ft.

Total cost:
$46,915,000

Cost/square foot:
$545.80

Completion:
February 2012

Photographer:
Araceli Gomez



The new Tulare campus fulfills two important goals of the Sequoias Community College District: relocating the college farm and improving access to potential students in the low-income South County region.

Tulare Center will evolve to serve the current and future needs of the community, while paying homage to its past. The design of the campus is Art Deco, with its geometric shapes, symmetry and repetition. This gives the new campus its own identity while acknowledging the Streamline Moderne style of the main Visalia campus.

A tilt-up concrete moment frame allows multiple panels to be produced at the same time, and creates a sense of uniformity without the stylistic feel of a warehouse. Art Deco details will be added through clean, simple, horizontal expressions and lines. This holds both an economic and structural value.

Although the frame is stationary outside, flexible curtainwall infill panels inside allow for a design that can adapt and change to fit the needs of the campus. A mall provides flexibility in storefronts and sustainability in clerestory windows, which allow daylight to penetrate into the mall and consequently into the interior buildings. Window walls on the exterior complement the clerestory windows by allowing light in from all other directions.







Snowline Joint Unified School District, Central Services Complex
Phelan, California

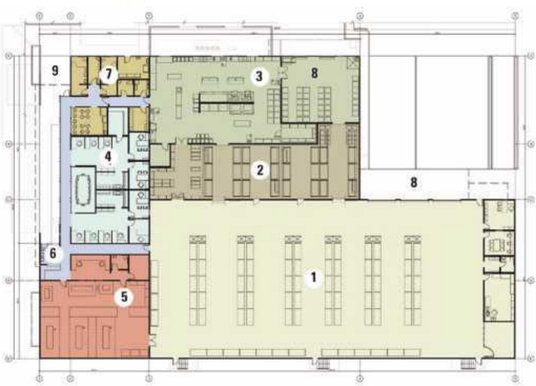
PCH Architects, LLP
Design team: Ralph Pacini, Principal-in-Charge; Michael Bern, Project Designer/Manager
Client: Snowline Joint Unified School District; Arthur J. Golden, Superintendent; Ray Coco, Director of Facilities
Area: 53,643 sq. ft.
Total cost: $8 million
Cost/square foot: $149
Completion: September 2009



Site plan

LEGEND
1. Visitor parking
2. Future business buildings
3. Warehouse/Kitchen/ Business building
4. Service yard/Docks
5. Existing arroyo
6. Filter/erosion control
7. Bio-swale/reclamation pond
8. Light towers
9. Central courtyard
10. Staff parking

Stormwater runoff



LEGEND
1. Warehouse
2. Dry/cold storage
3. Kitchen
4. Offices
5. Reprographics
6. Circulation
7. Support facilities
8. Dock
9. Entry

In an effort to promote district efficiency, Snowline Joint Unified School District plans to consolidate its business, printing, food-service and warehouse operations to one centralized location, while promoting environmentally conscious design through LEED principles.

The site is in a hot, arid desert community with high diurnal temperature swings, infrequent rain, flash-flood conditions and restrictive environmental standards for protecting indigenous plant and animal life.

The undeveloped 26-acre sloping site is stepped to minimize grading, reduce the scale of larger buildings, and provide increased visual control. Water conservation is achieved by diverting stormwater runoff from the street and central courtyard to an on-site bio-swale and tree-wells. Surplus runoff is permitted to flow at a controlled rate to the environmentally sensitive arroyo beyond the site.

The main warehouse/kitchen building is constructed with 8-inch-thick concrete walls to help moderate extreme temperature conditions. Filtered daylighting is provided to all occupied spaces. Cool roofs, low-emission-VOC materials, infrastructure for future photovoltaic panels on the large warehouse roof, and high-efficiency mechanical systems combine to complete the total sustainable solution.



South elevation



West elevation

Tyler Junior College, Ornelas Residence Hall
Tyler, Texas









Randall Scott Architects, Inc.

Design team: Randall B. Scott, AIA, Lead Designer/Principal-in-Charge; Gregory J. Conaway, AIA, Project Director/Co-Designer; Daniel Brantner, AIA, LEED AP, Studio Leader	
Client: Tyler Junior College; Jan Hurst, Vice President for Business Affairs	
Capacity: 462 beds	**Space/student:** 329 sq. ft.
Area: 152,193 sq. ft.	**Total cost:** $28.5 million
Cost/square foot: $187.26	**Completion:** July 2008
Photographer: Scott Linder (renderings)	

Tyler Junior College commissioned the architect to create a signature residence hall and commons building to reinstate the campus' Georgian Colonial architectural heritage after several decades of eclectic design.

Given that the project site was at the lowest elevation on campus and was bisected by a creek with significant portions of the site in an unusable flood plain, the design called for two limited-footprint, four-story residence towers paralleling the axis of the creek and taking advantage of the natural vistas. Two 100-foot-long, clear-span pedestrian bridges allow students to experience the aromas and sounds wafting from the creek below and the canopy of hardwoods above. To foster interactivity among residents, the design team created large verandas on each side of the creek that descend toward the water's edge. For more reclusive, Internet-immersed students, the design team included a cyber lounge—a high-tech messaging, entertainment and communal gaming environment—adjacent to the main student lounge.

Additional amenities include a computer room, billiards room, convenience store, club meeting room and a large, well-appointed meeting room with a catering kitchen.

Bucks County Community College, Upper County Campus Expansion and Renovation · *Perkasie, Pennsylvania*



SCHRADERGROUP architecture

Design team:
David L. Schrader, AIA, Lead Designer; Bruce E. Bachtle, AIA, Project Manager; Antonio Scanga, Associate AIA, Project Architect; David C. Mazzocco, LEED AP, LEED Coordinator

Client:
Bucks County Community College; James Linksz, President

Area:
61,000 sq. ft. (addition and renovation)

Total cost:
$12,499,000

Cost/square foot:
$204.90

Completion:
December 2009



The expansion to the Upper County Campus of Bucks County Community College increases the size of the existing facility by 28,500 square feet and includes computer labs, classroom/flex and office/administrative spaces, and a student commons.

The expansion incorporates a student cafe and library area, and provides small tables and comfortable chairs throughout for reading, studying and gathering. Various breakout rooms are incorporated in the design to promote collaboration among students and instructors. Additionally, numerous renovations and modifications were made to existing facilities.

Another goal of the project is to make multi-use space—such as internal large-group space and an outdoor amphitheater—available to the surrounding community. The addition, slated for LEED silver certification, incorporates sustainable-design principles and materials, including a rooftop garden serving as a plaza level above the student commons; a low-E, insulated glazing system; and a geothermal mechanical system.

The design of the building addition included a consensus planning process that involved—in addition to the entire design team—students, administrators, faculty, college board members and community members.





University of Arkansas for Medical Sciences, Education West Building · *Little Rock, Arkansas*







LEGEND
1. Main entry
2. Lobby/Circulation
3. Auditorium
4. Classrooms
5. Auditorium support
6. Administration

Wittenberg, Delony & Davidson, Inc. Architects

Design team:
Edward F. Peek, AIA; Chad Young, AIA; Gordon Duckworth, AIA

Client:
University of Arkansas for Medical Sciences; Larry Milne, Vice Chancellor for Academic Affairs and Research Administration

Area:
45,000 sq. ft.

Total cost:
$13,155,245.91

Cost/square foot:
$292.34

Completion:
August 2008



First floor

The University of Arkansas for Medical Sciences (UAMS) commissioned the architect to design the new multi-discipline Education West Building to respond to the anticipated growth of the student body and provide current students with the opportunity to use the world's leading technology.

The answer was a 45,000-square-foot nursing, medical and pharmaceutical education center designed to be a bold visual statement as the UAMS campus gateway. The center will house two, 225-seat auditoriums and 16 classrooms, eight of which can be combined to allow for larger audiences. With enough teaching space for 858 students, the Education West Building will greatly expand UAMS' ability to grow its enrollment and also is designed to allow for future vertical or horizontal expansion.

With a goal of achieving LEED certification, the architect has combined conversational practices and modern technology to make the Education West Building an environmentally friendly center that provides students with access to a wireless network and a state-of-the-art audiovisual system. The center's unique design embodies UAMS' vision for growth and will launch students to the forefront of today's medical education.

CAMPUS MASTER PLANNING

OUTSTANDING CAMPUS MASTER PLANNING



p. 324

LANDSCAPE

OUTSTANDING LANDSCAPE ARCHITECTURE



Visit SchoolDesigns.com.

Middle Tennessee State University, Campus Master Plan

Murfreesboro, Tennessee



BUILDING PROJECTS (above)
- C. Admissions
- E. Administration
- G. Academic
- H. Academic
- I. Academic center
- J. Performing arts/Music/Theater
- K. ITD Building
- L. Academic
- N. Physical Plant
- O. CIM
- P. Greenhouses
- Q. Academic A/B/C/E
- R. Student union
- S. COEBS Acad. D
- T. Mass comm. add.
- U. Honors housing
- Y. Science
- Z. Library
- AA. Academic F
- BB. Chiller plant
- DD. Student apartments
- EE. Physical plant
- HH. Parking decks 1-6

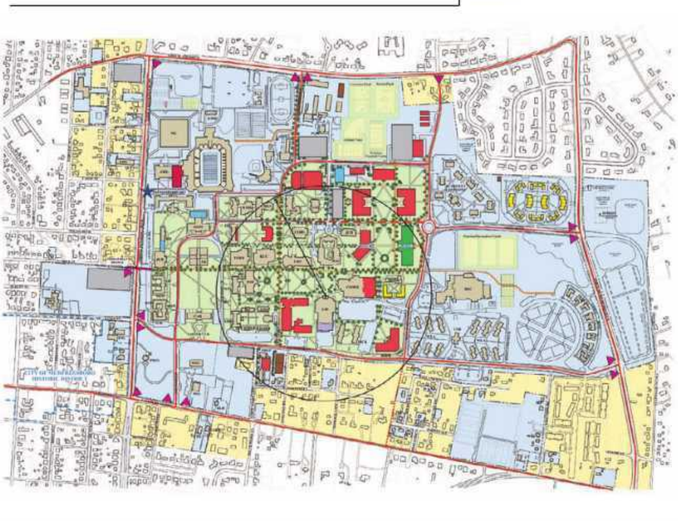
DEMOLITIONS (above)
- E. Midgett Building
- G. Natatorium
- I. Forrest Hall & ROTC Annex
- M. Tenn. Livestock Center/ Existing Greenhouse
- W. LRC appendage
- Y. Wood/Felder/Clement Gore/ Photography Building
- CC. Vaughn House
- GG. Ellington Annex
- JJ. Abernathy/Ezell Halls
- KK. McFarland Health Science

RENOVATIONS (above)
- D. Kirksey Old Main
- F. Cope Admin. Bldg.
- G. Alumni Mem. Gym
- V. KUC
- X. Davis Wiser-Patton
- FF. Ellington (possible renov.)

SITE IMPROVEMENTS (above)
- Aa. Entrance
- Ad. Improvements

- B. Landscaped pedestrian spines
- M. New athletic fields
- Y. Improved Main Quad
- II. New tennis courts
- LL. Infrastructure improv. campuswide

PROPOSED EXPANSION/ REDEVELOPMENT (below)
- University buildings
- University property
- Historic district
- Acquisition areas
- Proposed academic
- Proposed administrative
- Proposed student life
- Proposed student residence
- Proposed library
- Proposed athletic
- Proposed physical plant
- Proposed parking decks
- Primary vehicular circ.
- Primary pedestrian circ.
- New signage/entry gates
- Service access only
- Proposed athletic/recreation



Dober, Lidsky, Craig and Associates, Inc.

Associated firm:
Lose & Associates, Inc.

Design team:
MTSU: Patti Miller, Assistant Vice President for Campus Planning; Gene Fitch, Associate Vice President for Student Affairs/Dean of Student Life; Ginger Freeman, Director of Alumni Relations; Mike Gower, Associate Vice President for Business and Administration; David Gray, Assistant Vice President for Facilities Services; Faye Johnson, Assistant to the Executive Vice President/Provost for Special Initiatives; Lucinda Lea, Vice President for Information Technology/Chief Information Officer; Jack Thomas, Senior Vice Provost for Academic Affairs; DLCA: Arthur J. Lidsky, AICP, President/Study Director; George C. Mathey, AICP, Principal/Senior Consultant; Dorothy A. Atwood, AIA, Senior Associate; Margaret J. Spencer, Senior Associate; Mary Bush-Brown, Landscape Designer; Yvonne Santos, Senior Graphic Designer; Andrew Gillespie, Senior Data Analyst; David Gurka, CADD Specialist; Lose & Associates, Inc.: David Lose, FASLA; Chris Camp, ASLA; Michael Wrye, PE, CPESC, Emily Houston

Client:
Middle Tennessee State University; Patty Miller, Assistant Vice President for Campus Planning

Middle Tennessee State University (MTSU), founded in 1911 as a two-year program for teacher training, has evolved into the largest public university in the mid-state. Despite recent growth in enrollment, MTSU continues to believe that the goals of enhancing academic quality, supporting student-centered learning, and promoting partnerships with other entities to enhance educational, social and economic well-being are fundamental.

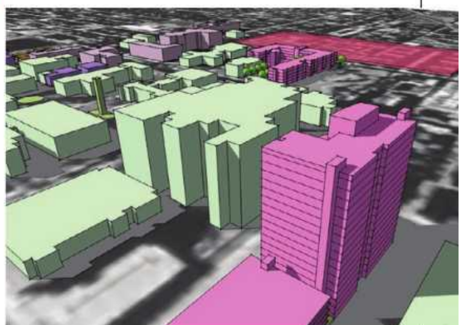
The campus master plan describes the physical resources that exist, the additional facilities or improvements that will be required, and how the university foresees addressing these projected needs. Support for the plan was gained through careful communication, analysis, justification and the development of a rational, exciting and feasible campus plan. By far, the most important issue was the need to support academic programs within the reality of financial resources.

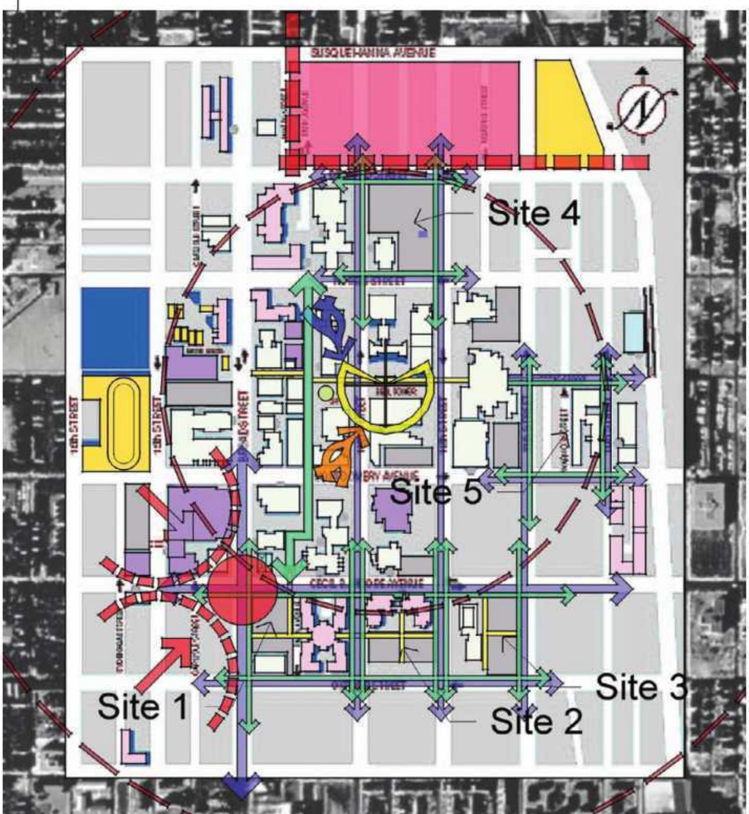
An important feature of the campus design is the creation of a pedestrian-friendly environment. By moving parking to the perimeter, roadways will be eliminated or modified to restrict vehicular circulation through the campus core and a west-to-east central pedestrian spine will emerge. The spine will be reinforced by a mix of academic, administrative, athletic, library, residential and student-life buildings, and landscaped open spaces.

Temple University, Housing Master Plan
Philadelphia, Pennsylvania









KSQ Architects, PC

Design team:
Armand Quadrini, David Short, Garret Krishan, Chester Ehrig, Kimberly McCoy

Client:
First Worthing University Group; Rick Dickason, Vice President, Director of Northeast Development (former)

Photographer:
Garrett Krishan

Temple University is challenged by an increasing demand for high-quality student housing. In conjunction with First Worthing, a national provider of student housing, the design team developed a holistic housing master plan. The focus of this effort was to identify opportunities for new student housing while maintaining the context of the campus and preserving the surrounding neighborhoods. Because Temple is in an inner-city urban area, special priority was given to issues such as pedestrian access, proximity to existing campus resources and security.

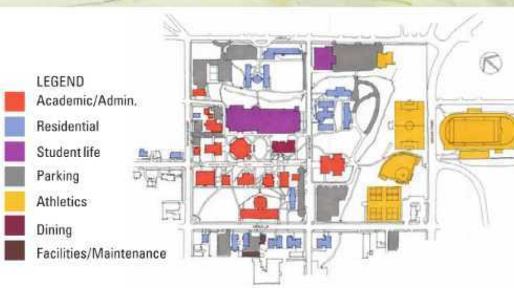
All urban-planning solutions link proposed housing interventions to the university's pedestrian promenade, Liacouras Walk. Internal courtyards will connect directly to existing pedestrian ways, and provide security and private spaces while maintaining public access. The design also maximizes housing density, respects the existing scale of the context, and develops unit types that complement existing university-owned housing stock.

Marietta College, Master Plan
Marietta, Ohio









Noelker and Hull Associates, Inc.

Associated firm: Derck & Edson Associates

Design team:
Michael G. Hull, AIA, President, Principal-in-Charge; Stuart E. Christenson, AIA, LEED AP, Principal/Senior Design Architect

Client:
Marietta College; Jean Scott, President

Photographer:
Steve Patricia

Marietta College is a private, four-year, liberal-arts school of 1,350 full-time students in historic Marietta, Ohio. The school plans to expand enrollment to 1,600 to 1,800 undergraduate and 200 to 400 graduate students in the next 10 to 15 years. A campus master plan was developed to provide the physical framework and guidelines for this strategic growth.

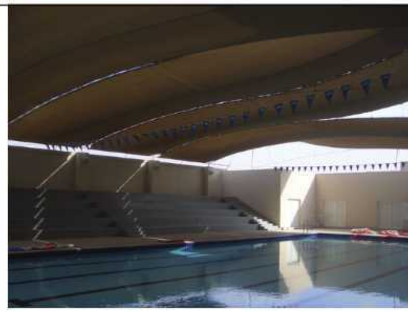
Major components of the master plan include expanded residence hall facilities to increase the quantity and quality of student-living options; the conversion of a major traffic artery that divides the campus' northern and southern properties into a pedestrian walkway to enhance student safety; and a new and expanded dining facility to accommodate expected student population growth and visually anchor a new campus central lawn.

The master plan allows for development in all major campus settings, academic programs and related student services. The broader concept suggests various ways in which Marietta College can work with the city for improved vehicular traffic, pedestrian safety, college visibility and parking for the betterment of the college, environment and surrounding community.

Deira International School, Campus Master Plan

Dubai Festival City, Dubai, United Arab Emirates









THA Architects Engineers

Associated firm: Al Wasl Al Jadeed Consultants, Architects, Engineers & Planners

Design team: Jeffrey Bennett, AIA; Madonna Bennett, AIA; Aaron Wawrzyniak, Associate AIA	
Client: Educational Services Overseas Limited (ESOL); Walid Abushakra, Superintendent	
Capacity: 2,560	**Space/student:** 15.9 square meters
Area: 40,804 square meters (total): 21,357 square meters (Phase I); 19,447 square meters (Phase II)	
Total cost: $60 million	**Completion:** Summer 2006 (Phase I); Summer 2009 (Phase II)
Photographer: Walid Abushakra	

Designing school campuses in the Middle East presents different challenges for the design team. When the project was master planned, Deira International School required totally separated facilities for boys and girls as a result of cultural and religious restrictions. However, the budget required shared use of expensive facilities such as gymnasiums, pools, kitchens, canteens and outdoor athletic fields.

The architect maximized the site by situating the kitchen/canteen, auditorium, gym and athletic fields centrally for shared access; the boys' and girls' schools are on either side.

Even more challenging was the need to be able to convert the campus to a co-educational facility in the future. The plan has multiple classrooms with integrated toilet rooms at ground level so that the boys' school can become the lower elementary school, and the girls' school can become the middle and high school. Prayer rooms in both schools acted as "hinges" in the plan and also were adaptable spaces for larger specialty classrooms, such as art and music, when the conversion to a co-ed campus was made.

Shading devices were incorporated in the building design, as well as the exterior play areas, for protection from the hot desert sun. In the second phase of the campus master plan, a second- and third-floor media center was designed over the original tennis courts to provide a covered outdoor connector and play space between the upper and lower elementary schools, which now are co-ed.

Northeastern University, Veterans Memorial
Boston, Massachusetts



Pressley Associates, Inc., Landscape Architects

Associated firm: Bauen Studio, Architects

Design team:	Marion Pressley, Principal-in-Charge; Jay Emperor, Project Manager/ Landscape Architect; Darl Johnston, Landscape Designer; Mo Zell, Architect; Marc Roehrle, Architect
Client:	Northeastern University; Dan Bourque, Vice President of Facilities
Area:	10,000 sq. ft.
Total cost:	$1.1 million (design and construction of the Veterans Memorial)



The Northeastern University Veterans Memorial honors the memory of those soldiers—students of Northeastern—who lost their lives while serving in the U.S. Armed Forces. The memorial provides a place for contemplation, reflection and remembrance.

The project's significance lies in its ability to transition between public space and private outdoor space seamlessly. Three parallel elements co-exist to organize the site: a contemplative garden that honors the fallen soldiers, a public plaza for ceremonial events, and a black granite wall with poignant images of each conflict. Plant material was selected to strengthen these spaces.

The polished granite wall dividing the memorial space is dual-faceted. The southern elevation features a laser-etched mural depicting iconic images of various American military conflicts. The northern facade is the focal point of the memorial; each lost soldier is represented by a single, stainless-steel plate. A 48-foot-long granite bench defines the northern edge of the memorial space.

Thirteen bands of flush granite, along with 50 small LED lights abstracting the American flag, unite the spaces.









Green Field









NOTES

Sustainable-design principles put into action in today's education institutions.













The exterior of the south entry features low-E argon-filled, insulated glass, which reduces energy costs. Photo courtesy of Anton Grassl/Esto

Community response:
Responses to the new SRFC have been overwhelmingly positive from students, staff and community residents. The active involvement of these user groups was fundamental to creating a sense of pride and ownership, as well as a clear vision for the center, which is considered cutting-edge from an environmental, structural and equipment perspective. The SRFC has tripled recreational opportunities on campus and provides a tenfold increase in fitness/wellness offerings, welcoming 1,500 daily visits vs. just 2,000 per week prior to construction. More than 125,000 visits have been documented since its opening.

University of Maine, Student Recreation & Fitness Center, Orono, Maine
Architect: Cannon Design

Green products and processes:
The center was built to LEED silver certification standards. All building projects were screened for their recycled content and sustainable contribution, and all products meet the "Green Seal" standard of environmental responsibility. Self-adjusting occupancy sensors and photo cell-controlled lighting systems achieve significant energy savings, and low-flow fixtures in locker/shower areas save on water consumption. Exterior landscaping was designed to be eco-friendly. About 85 percent of materials were recycled, and 50 percent of all building materials were harvested or manufactured locally.

Unique green aspects of the facility:
The SRFC showcases the natural beauty of its surroundings through ample fenestration and the use of locally harvested and manufactured materials, including quartzite stone veneer harvested near Lake Champlain, N.Y., and green and purple slate from Vermont. Glass and structural steel are manufactured locally. Recycled materials include copper wall panels containing 90 percent post-industrial recycled metal, maple veneers of 100 percent pre-consumer recycled wood fiber, and recycled rubber sports flooring. VOC-free paints and the exclusive use of green housekeeping products also ensure high air quality. Occupancy and carbon-dioxide sensors in the mechanical systems govern the building's ventilation.
The university also purchased Renewable Energy Certificates for the first two years to cover about 80 percent of the building's predicted electrical usage.

Washington Technology Magnet Middle School, St. Paul, Minn.
Architect: Cuningham Group Architecture, PA

What considerations were given to green products and processes?
As a first step in planning Washington Technology Magnet Middle School, the district and architect determined the existing school would be renovated and supplemented by an addition rather than demolish the old and construct a new building. This decision not only reduced the project's impact on the environment, but also preserved the school's place in the history and character of the neighborhood. The addition was situated over the existing building footprint so no additional land was covered to achieve the expanded floor area.

Unique green aspects of the facility:
In addition to the decision to renovate rather than build new, other sustainable elements were incorporated. Rainwater runoff is directed to sod and planted areas, and new landscaping with drought-resistant plantings will require no irrigation. More than 50 percent of interior non-structural elements remain, with light fixtures and wood trim reused in the new construction. Low-emitting materials, paints and adhesives were specified, and recycled content materials were used where appropriate.



The center of the Technology Gallery addition has daylight reaching through three interior floors from a roof monitor. Photo courtesy of Dana Wheelock

Special note:
-75 percent of occupied spaces now receive daylight, and many interior spaces have views to the exterior environment.



The open, airy environment throughout the small learning communities and activity areas enhances the experience for students, staff and visitors. Photo courtesy of Mark Boisclair

What was the community response to the project being environmentally responsible?
The intensely collaborative goal-setting and design process for the school included district leaders, faculty, students and neighborhood representatives. Environmental responsibility was a central theme from the earliest stages of planning, and the community reaction has been overwhelmingly positive.

Betty Fairfax High School
Laveen, Ariz.
Architect: DLR Group

Green products and processes:
Environmental responsibility was one of the six design goals established at the outset to guide the design process and form the basis for judging the project's success. Green products and processes were used whenever possible. Green features include dual-pane glazing and shade structures, extensive daylighting, a high-performance building envelope and chiller system, thermostat and lighting occupancy sensors, carpeting with recycled content, local material use including concrete masonry units, and drought-tolerant landscaping with native vegetation.

What are some unique green aspects of the facility?
Fresh air, daylight and expansive views are highlights of this high school. Daylight in all core classrooms is maximized through the building's orientation, and thermal heat gain is diminished. The daylighting strategy is supported by insulated, low-E windows and occupancy sensors for artificial lighting. Other energy-efficient features include a high-performance building envelope, an efficient central chiller system and native landscaping. Indoor air quality is enhanced because of the use of durable, low-VOC-emitting materials that require minimal maintenance. The small learning communities composed as a campus are built in two-story configurations, reducing the building footprint and creating shaded walkways for covered outdoor spaces.

Roberts Wesleyan College, Golisano Library
Rochester, N.Y.
Architect: Leo A Daly
Associated Firm: SWBR Architects

When planning this facility, what considerations were given to green products and processes?
From design conception, the college and architect embraced the idea of building the new library as a living example of sustainable-design techniques. In order to plan an efficient design process, two "eco-charrettes" were conducted in which the LEED-NC rating system was used as a basis. The green planning process ultimately was shaped by public input from architects, college administrators, facilities management, librarians, students and community members.

Some unique green aspects of the facility:
The new library has become a beacon on campus, literally and educationally. Upon entry, a two-story atrium is flooded with daylight, extending energy efficiency through natural means. The interior of the building features rapidly renewable, regionally harvested materials such as cork flooring, sunflower board cabinetry and carpet squares of highly recycled content. The facility uses a geothermal well field beneath the parking lot, allowing the structure to pull these loads directly from the Earth.



The strategic use of daylight helps to reduce energy loads in the library. Photo courtesy of Tim Wilkes Photography

Community response:
The Golisano Library is the first higher-education facility in Rochester to receive LEED silver certification and has been well-received by the community. Sustainable trends and technologies are used throughout the library, boasting a 40 percent energy reduction, according to the New York State Energy Research and Development Authority. This reduction provided for additional state funding, allowing for the development of further sustainable features. Compared with a static, unchanging structure, the new library serves the college as a dynamic teaching tool—educating patrons about the benefits and features of green design.



The design provides daylight to the majority of learning spaces and 75 percent of occupied spaces, and 90 percent of all spaces have direct views to the outside. Photo courtesy of Dana Wheelock

Community response:

The architect sought a LEED innovation credit by connecting an energetic, young design team contingency with key school officials to come up with signage and a presentation on sustainability. One fifth-grade teacher led the project on behalf of the district. Together, the design team and client found a way to convey the information in an understandable way—with icons and other visual graphics throughout the school that help get across the sustainable message. It now is being used by the school and the district as an educational tool for the entire community.

Watertown-Mayer Elementary School
Watertown, Minn.
Architect: Cuningham Group Architecture, PA

When planning this facility, what considerations were given to green products and processes?

The environmental focus for Watertown-Mayer Elementary School was established early in the design process and evolved into a set of clearly defined goals that guided design decisions. The elementary school was designed with the intent of achieving LEED silver certification.

Unique green aspects of the facility:

Notable sustainable-design features include a geothermal well system for heating and cooling; water- and energy-efficient systems; the use of regionally sourced materials and resources; and stormwater-management methods including retention ponds, site infiltration, and the incorporation of swales and native species. State-of-the-art, high-efficiency mechanical systems circulate fresh air in each classroom. Optimizing the energy performance of the building and its systems is projected to result in a 40 percent savings in energy costs.

T.C. Williams High School
Alexandria, Va.
Architect: Moseley Architects, PC



Green products and processes:

Enhancing the learning environment and increasing building efficiency through green design were the main goals during planning. The project team strived to provide a school with optimum indoor air quality through the use of low-emitting materials, operable windows and a dedicated outdoor-air ventilation system with MERV 13 filtration for all other times. Daylight is brought into classrooms and commons spaces through large windows and clerestories. In accordance with the LEED system, the design team also focused on cutting energy use and cost, reducing water use and using materials wisely.

What are some unique green aspects of the facility?

Innovation was the key to making T.C. Williams green. A 450,000-gallon underground cistern collects rainwater from the school's roof and stores it for use in toilet flushing, irrigation and air conditioning. A portion of the school's roof is covered by a roof garden, which provides stormwater management and educational opportunities. The commons area features an interactive dashboard that provides students access to the energy and water-use data collected by the building's automation system. One strip of black roofing membrane has been placed on the building's mainly white membrane roof so students can monitor how the different surfaces affect building roof temperature and heat islands.

roof garden

A roof garden provides stormwater management and educational opportunities. Photo courtesy of Hoachlander Davis Photography

What was the community response to the project being environmentally responsible?

The decision to go green was encouraged by the Alexandria, Va., community. The efforts of the community organization Alexandrians for a Green T.C. played an important role in the decision to pursue LEED certification. In a community that already had begun to champion the green building movement, T.C. Williams is a symbol of support for sustainability.

Surry Community College, North Carolina
Center for Viticulture & Enology, Dobson, N.C.
Architect: Little



As a new campus building on an existing campus site, the Center for Viticulture & Enology reduces the number of parking spaces and supports the density of the campus.

What was the community response to the project being environmentally responsible?

It was a common goal to design a facility that speaks to the community college's stand toward the stewardship of the environment and the essence of the building: viticulture and enology's ties to the land and agriculture, weather patterns, grapes and their patina into wine.

When planning this facility, what considerations were given to green products and processes?

Given the facility's connectivity to the natural environment and its roots in viticulture, the products were selected for the project-based sustainable principles. Minimal finishes were selected for the interiors in lieu of exposed structural features. Recycled and renewable products such as cork, fabric panels, polished concrete, recycled-content composite wood ceiling panels, recycled content carpet, low- or no-VOC paints and adhesives, were selected. Local North Carolina granite was selected for the base of the building.

What are some unique green aspects of the facility?

The facility's sustainable strategies include maximizing daylighting while minimizing heat gain by the use of exterior sun louvers and low-shading coefficient glass. High-albedo materials are used throughout the horizontal surfaces of the project: white single-ply adhered TPO membrane roofing, light concrete sidewalks, and compacted crushed granite in gardens and ramps. The facility is designed to accommodate a rainwater-harvesting system if the budget allows. Low-flow plumbing fixtures, no irrigation, and selection of native plants and trees also support a strategy to minimize water use and provide water-efficient landscaping. Construction waste management will ensure that the demolition debris from the existing houses on the site, as well as waste from the new construction, will be diverted from landfills.

Lincoln Elementary School
Cedar Falls, Iowa
Architect: StruXture Architects

When planning this facility, what considerations were given to green products and processes?

The design gave consideration to the items that returned the taxpayer's investment most effectively over the long term. Building materials were chosen for longevity and low maintenance; efficient light fixtures, lamps and switching allow flexibility in light levels and minimize energy usage. Low-E, double-glazed windows were used for energy efficiency. Flexible spaces were designed for multiple use and duplicity of use, thereby saving on total program space requirements.

What are some unique green aspects of the facility?

A well pump-and-dump geothermal heat-pump system was used. Building materials were selected that would have longevity and low maintenance over the long term of the building, such as brick, stone and block masonry construction, and terrazzo floors. Lighting fixtures and lamps were selected for low energy consumption and flexibility in switching for various lighting levels or requirements. Flexibility was a guide in the design of spaces, and the facility can be reconfigured easily in the future as program needs may change.



Building materials were chosen for their longevity and low maintenance. Photo courtesy of Dale Photographics, Inc.

Low-maintenance material choices:
- Brick
- Stone and block masonry
- Terrazzo floors



Daylight in corridors and hallways is maximized at Logan Middle School.

Overall design notes:
-Daylight is maximized with high-performance glass (more than 80 percent of the rooms have daylight views).
-Use of masonry, regional materials and low-VOC-emitting paints and finishes.
-10 percent recycled content in aluminum windows and steel.
-The site minimizes transportation costs by using available land on the existing high school campus.
-A bioretention system for stormwater quality.
-Water-efficient landscaping.

Logan Middle School
North Versailles, Pa.
Architect: HHSDR Architects/Engineers

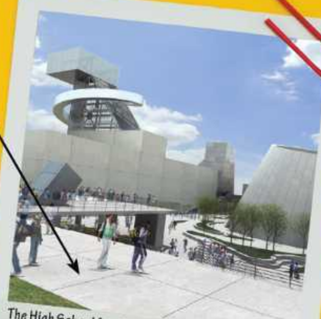
When planning this facility, what considerations were given to green products and processes?
The project envelope, and mechanical and electrical systems were designed for energy efficiency. A building-wide energy-management system curbs utility costs for the district.

Unique green aspects of the facility:
-Lighting. The interior uses occupancy sensors and T-8 fixtures; the exterior has light pollution-reducing fixtures.
-Plumbing. Low-flow toilets, urinals and faucets.
-Heating/cooling. Boilers use full modulating burners for load-appropriate turndown; the chiller uses environmentally friendly R-134a refrigerant; both chilled- and hot-water pumps use variable-frequency drives to allow for initial balance at the lowest possible speed to lessen full-load energy use; the constant-volume air-handling units use variable-frequency drives to allow for initial balance at the lowest possible speed to lessen full-load energy use; outdoor-air delivery is monitored; the mechanical systems were commissioned.

High School for the Visual and Performing Arts, Los Angeles
Architect: HMC Architects

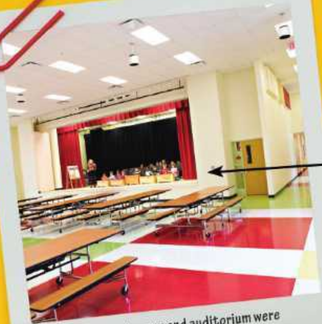
What considerations were given to green products and processes?
To enhance student and staff comfort in a bustling urban environment, several green elements were incorporated: recycled-content materials include wheatboard casework, fly ash concrete, batt insulation and nylon carpet fiber. Materials that meet clean indoor-air requirements include insulation, ceiling tile, rubber flooring and carpet. Fifty-percent off all wood will be FSC-certified.
The performance specifications for recycled content and low-emitting materials became the template for development of LAUSD guide specs.

Unique green aspects of the facility:
Several unique program requirements presented sustainability challenges. Large volumetric spaces in the library, lobby and theater, as well as the stage and specialty classrooms for dance, music and art, are difficult to heat and cool efficiently. A variety of sustainable features engaged throughout the campus combine to achieve an impressive 41 CHPS points and beat energy-code requirements by 20.7 percent. Other green aspects: minimized parking and building footprint on an urban landfill site; cool roof and reflective paving to minimize heat-island effects; lighting controlled by daylight sensors; and operable windows in all classrooms. The district also received additional state Energy Efficiency Grant funding, and will recycle 75 percent of construction and demolition waste.



The High School for the Visual and Performing Arts, scheduled for completion in 2009, will beat energy-code requirements by more than 20 percent.

What was the community response to the project being environmentally responsible?
The High School for the Visual and Performing Arts is part of a wave of construction revitalizing downtown Los Angeles. Sited within the Grand Avenue cultural corridor, the school is adjacent to the Colburn School of Performing Arts, the Museum of Contemporary Art, and Walt Disney Concert Hall. From the beginning of the design process, the community was engaged to ensure all issues and concerns were addressed in the final product. The result is a school that responds to the community's level of environmental responsibility.



minimized footprint

The large cafeteria, gym and auditorium were combined at Cherry Valley Elementary School.

Project note:
-Tectum was used for acoustical panels and roof deck in the gym. It was manufactured within 10 miles of the project.

Cherry Valley Elementary School
Newark, Ohio
Architect: Legat & Kingscott, LLC

What are some unique green aspects of the facility?
-The large cafeteria, gym and auditorium were combined to minimize the footprint of the building to maximize open space.
-Energy-efficient HVAC system.
-No irrigation system.
-Commissioned building systems.
-Regionally produced materials were used for interiors and exteriors.
-Building massing for natural lighting.

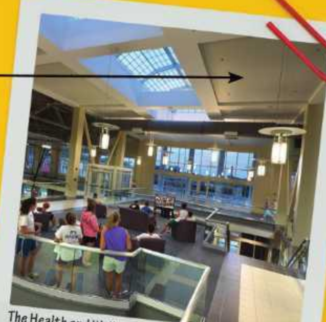
Green alternative:
-Durable concrete blocks were used for walls instead of gypsum board.

Longwood University, Health and Wellness Center, Farmville, Va.
Architect: Moseley Architects, PC

Green products and processes:
During planning, the project team used the LEED green building rating system to guide design decisions. Energy efficiency, water-use reduction, indoor environmental quality and waste minimization were given top priority. In order to improve the building's energy efficiency, the project team considered not only what type of mechanical system would best serve the building, but also how the envelope would affect the building's energy use. Water-efficient plumbing fixtures were given preference, as were recycled, regionally manufactured and low-emitting materials.

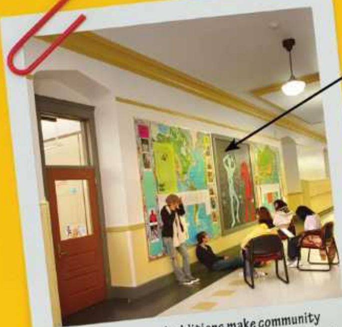
Unique green aspects of the facility:
The building envelope has been enhanced with thicker roof and wall insulation to improve energy efficiency. Carbon-dioxide sensors have been installed in spaces with highly variable occupancy, such as gyms and exercise rooms, to adjust ventilation. A 40-percent reduction in water use is expected as a result of installing waterless urinals, low-flow showers and ultra-low-flow lavatories. All adhesives, sealants, paints, carpets and composite wood materials contain no or low amounts of volatile organic compounds (VOCs). All wood doors, sports flooring and casework are FSC-certified as being sustainably harvested. More than 54 percent of the materials used to construct the facility were manufactured within 500 miles of the project site, and more than 28 percent were made of recycled content.

low-VOC paint



The Health and Wellness Center has increased enthusiasm for sustainability. Photo courtesy of Maylone Photography

What was the community response to the project being environmentally responsible?
The Health and Wellness Center, which earned LEED gold, serves as the keystone for the university's efforts to integrate principles of sustainability throughout the campus, and the university is using the facility as a model for other projects.



The renovations and additions make community use possible and restore pride in the neighborhood.
Photo courtesy of Chris Roberts

Community response:
Community members have embraced the restoration of Lincoln High School and are thrilled that the green approach to updating the school coincided directly with the goal of respecting its historical significance. Since the completion of the renovation, the neighborhood continues to improve as dilapidated homes and storefronts are replaced by new townhomes and businesses, and other historic homes are restored.

Lincoln High School, Tacoma, Wash.
Architect: DLR Group

Green products and processes:
Green design solutions were considered throughout planning. The school was selected to participate in the Washington Sustainable Schools Protocol (WSSP) Pilot Program, which provided grants to study sustainable-design strategies. Elements analyzed included gray-water reuse, daylighting control, window reuse vs. replacement, and the use of wood in lieu of steel. By participating in this study, the school informed the development of one of the most important pieces of building-related legislation in the state. In addition to pilot-program participation, the design team employed sustainable choices appropriate to the overall project goals.

Unique green aspects of the facility:
On-site sustainable construction practices involved preservation of most of the original structure, minimizing landfill contribution. Restored and remounted original school chalkboards in the Small Learning Center living rooms are used to display team-building projects and various collaborations. The site itself is considered historic; old-growth trees were preserved during construction.

Well-organized ductwork, outside air economizers and reclamation of the original, large, operable windows result in natural ventilation opportunities and daylighting which, in tandem with occupancy sensors, reduces artificial light consumption significantly. In the science wing, classrooms are stacked to enable efficient sharing of systems and resources.

Indiana University, Classroom Building Bloomington, Ind.
Architect: Rowland Design, Inc.

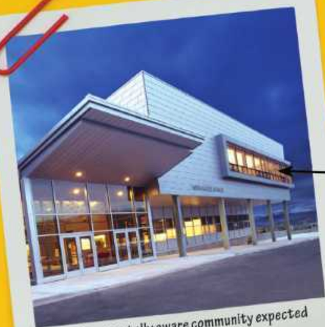
What are some unique green aspects of the facility?
The goal of this design was to create a building that functioned well for the university spatially and aesthetically, used sustainable materials and stayed within the budget. The site was chosen for its proximity to public transportation and its accessibility to pedestrians from the core of the campus.

Site plans:
By completely utilizing the functionality of the project site, the unique design uses existing limestone blocks native to Indiana as sculptural elements and generates a landscape from native growth plant material.



The site was chosen for its proximity to public transportation and its pedestrian access.
Photo courtesy of Eric Rowland

A building of distinction:
The team approached the IU Classroom Building holistically, and each phase of the project sought to make every aspect fit together through the efficient use of space and materials, and the conscious reflection of Indiana University's distinct personality.



This environmentally aware community expected the new school be at least LEED-certified. Photo courtesy of Time Frame Photography

Aspen Middle School, Aspen, Colo.

Architect: Studio B Architects and Hutton Ford Architects

Green products and processes:

Green was a major consideration during the design team interviews and selection. During the campaign leading up to the bond election in November 2005, the Aspen School District and the design team promised voters that the new school would become the most energy-efficient building on the campus, and that it would have lower utility costs per square foot per year than the old building it would replace. A wide variety of materials and systems were considered and analyzed to achieve these goals.

What are some unique green aspects of the facility?

Many factors contribute to the sustainability and efficiency of the building, such as low-water-use plumbing fixtures, operable windows, reused casework, direct-digital-control system for HVAC, and indirect evaporative cooling in select areas. Energy modeling for the new building revealed that it should save about 890,000 pounds of greenhouse gas per year, compared with a new building of the same size that simply meets existing energy codes. The design team then challenged itself to devise a scheme that would increase that number to 1 million. Because the building was already highly efficient, it was necessary to pursue renewable energy. The selected option was an on-ground 45 kW/H photovoltaic system to be installed nearby. Infrastructure is in place so the system can be installed once fund raising is completed.

What was the community response to the project being environmentally responsible?

Early in the design process, the architectural team approached a local entity, the Community Office for Resource Efficiency (CORE), to inquire whether the project was eligible for a grant to fund even more sustainable features. The result was a grant of $250,000—the largest in CORE's history—awarded for the design and installation of exterior sun shades on the western exposure; interior sun shades on eastern and southern exposures; occupancy and photocell controls for lighting; and a solar ventilation air-heating system at the gymnasium. All of the above are operational and contribute toward the project's LEED gold certification.

Beaver Country Day School, Athletic Center Chestnut Hill, Mass.

Architect: HMFH Architects, Inc.

Green products and processes:

The Beaver Country Day School Athletic Center has vibrant daylight throughout and a high level of transparency in the interior. A programmable lighting system allows users to conserve energy when artificial lights are not needed. The insulation in the walls, roof and concrete slab exceeds code requirement, reducing the energy needed for heating and cooling this large facility. Low-flow showers and sinks reduce water consumption. Polished concrete flooring was chosen for the main gallery and locker rooms because of its durability and low maintenance needs.

Unique green aspects of the facility:

The most striking element of the new athletic center, both from a green perspective and from an overall design perspective, is its emphasis on vibrant daylighting. Many traditional gymnasiums are windowless, low-transparency structures relying heavily on artificial light; the new gymnasium has two walls of large windows. An all-glass wall further improves use of light and creates a feeling of openness, visually connecting the gymnasium with the main circulation gallery, which features extensive skylights like those in the locker and fitness rooms.



Beaver Country Day School's Athletic Center uses polished concrete flooring for its durability and low maintenance needs. Photo courtesy of Wayne Soverns Jr.

Community response:

The extraordinary amount of daylight present in the new Athletic Center has been received enthusiastically by its users, and has been a major factor in the overall success of the design. Users may not even be aware of the sustainability benefits of natural light when they praise the gymnasium's brightness and its light and airy feel, providing a wonderful example of a green feature that also can be viewed simply as excellent design.



The center is sited on the edge of a heavily wooded hillside and is designed to take advantage of the northern view into the woods.

Community response:
As one of the first facilities in Alabama seeking LEED gold certification, the response has been enthusiastic. Both the groundbreaking and dedication had participation by state representatives, as well as press coverage. There has been a great demand for tours of the building, including other 4-H groups. Booking for events has reserved the facility for months in advance.

Alabama 4-H Center, Environmental Education Building, Columbiana, Ala.
Architect: Davis Architects

When planning this facility, what considerations were given to green products and processes?
Because this facility was planned as an environmental education and conference center for Alabama 4-H, the facility always was intended to be a building that was sensitive to its surroundings and to the natural environment. During the early stages of programming, the goal was established to achieve LEED gold certification. During the design phase, extensive research was done to determine the best products that could contribute to the sustainability of the building while being available locally.

Unique green aspects of the facility:
The building is on the edge of a heavily wooded hillside and is designed to take advantage of the northern view into the woods. Among the many aspects that earned LEED certification points are roof-water collection for fire protection and flushing toilets; waterless urinals; materials composed of recycled products; occupancy sensors for lighting and HVAC; daylighting; natural and locally available materials; pervious paving; enhanced commissioning; and landscaping that was indigenous and drought-resistant.

Dallas County Community College District, Cedar Valley College, Science/Veterinary Technology/Allied Health Building, Dallas
Architect: HOK

What are some unique green aspects of the facility?
The facility is designed with a shallow floor plate that will allow more than 90 percent of daylight to penetrate into classrooms and labs. The exterior skin of the building is a metal cladding, incorporating "cradle to cradle" manufacturing. Highly efficient glazing and energy-efficient fluorescent lighting will result in an estimated 17.5 percent energy savings. The roofing material is certified with "Cool Roofs" and will help reduce heat gains. The concrete pavement has a high-albedo factor that also will help reduce the heat-island effect.

What was the community response to the project being environmentally responsible?
The campus staff is very excited about the new building and, as a result, has introduced a new sustainable curriculum offering for students. All construction-site recycling efforts are being tracked closely by the college. This building and its sustainable features will be used to monitor other environmental efforts for the campus. The facility ultimately will be used as a teaching tool for students and the community.



The new facility is expected to open in 2009.

Special consideration:
Turf on the site has been reduced, and ground cover, shrubs and trees have been increased by more than 70 percent. As many trees as possible were preserved, and those that had to be removed were relocated.



rapidly renewable materials

Daylight (via large classroom windows and clerestory windows) and views to the exterior were provided from all occupied spaces.

Aurora Elementary School
West Fargo, N.D.
Architect: YHR Partners, Ltd.

When planning this facility, what considerations were given to green products and processes?

Preventing light pollution to the adjacent residential neighborhood was important to the community. Maximum energy efficiency was requested during planning. The school also wanted the interior environment to be free of volatile organic compounds and mold contamination to provide a healthful learning environment for students. The entire facility was planned to have views to the exterior and daylighting in all occupied spaces.

What are some unique green aspects of the facility?

The building has high-efficiency, dual-fuel mechanical boilers (gas and electric) and fresh air ventilation with a heat-recovery system. Exhausted air exchanges its heat with the incoming fresh air to heat up the incoming air, reducing the energy required to heat the building in the winter. Occupancy and photo sensors in rooms shut lights off automatically based on room occupancy or daylight conditions. The building used recycled building materials, fly ash concrete, steel structure, carpeting, ceiling tile, aluminum windows and wall fabric. Regional and rapidly renewable materials were chosen: concrete, concrete block, brick, linoleum flooring, FSC-certified wood trim doors. The carpet and flooring materials and adhesives have no VOCs. Low-VOC paint and mold-resistant paperless gypsum board were used on exterior walls. All windows open for natural ventilation.

What was the community response to the project being environmentally responsible?

The community of West Fargo has responded favorably to the environmentally responsible choices made on the project. The school board and the administration appreciate the reduced operating costs of the new facility. The teachers, staff and students are all enthusiastic about the healthful indoor environment and have spoken about the daylight, exterior views and clean indoor air of the new school.

Bucks County Community College, Upper County Campus Expansion and Renovation
Perkasie, Pa.
Architect: SCHRADERGROUP architecture

Green products and processes:

Because the project aimed for LEED gold or silver certification from the earliest stages of planning, a multitude of options were considered to help meet the requirements for certification, as well as to satisfy an overall desire to approach the project in the most sustainable way possible. A design charrette that included local community members, college faculty, administrators and students was conducted as part of the sustainable goal-setting process, and ultimately was critical to the success of the project.

What are some unique green aspects of the facility?

- Ground-source heat pump for HVAC.
- Solar hot-water heating for domestic hot-water supply.
- On-site stormwater quality and quantity management.
- Zero-irrigation native landscaping.
- High reflective and vegetative roof.
- Solar shading for seasonal heat-gain control.
- Use of local materials.
- Use of high-recycled-content materials.
- Use of low-VOC materials.
- Low-flow water fixtures for 30 percent reduction in water usage.
- Incorporation of spaces for community use.
- Preferred parking offered for low-emission and hybrid vehicles.

solar shading



Solar shading provides heat gain control throughout the seasons.

Community response:

This project marks the beginning of the college's commitment to approaching projects sustainably. As such, the project is serving as a model for and is helping to educate the community about the possibilities and benefits of sustainable design. The community was involved from the outset, being invited to participate in planning and sustainable goal-setting through a design charrette that included college faculty, administration and students. The publicly funded college wished to show responsible tax-dollar spending by creating a healthful, energy-efficient building that plays an important role in the college curriculum and offers opportunities for use to the general community.

Douglas County School District, New Elementary School Prototype
Castle Rock, Colo.
Architect: RB+B Architects/ H-F Architects, LLC



Sun shades reduce heat gain from direct sunlight and reduce glare inside classrooms. Photo courtesy of Paul Brokering

Green competition:
This school is the result of an open design competition, in which firms designed a complete building and demonstrated how it could be adapted to three different sites. A primary objective of the competition was to reduce energy consumption and utility costs substantially compared with typical elementary school buildings. The other significant component of the competition was to use high-performance design practices to enhance education.

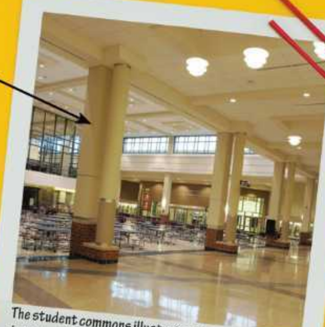
What are some unique green aspects of the facility?
- More than half of the classrooms achieve required light levels without artificial lighting for most of the school day (the remainder require about 30 percent supplemental lighting).
- Upgraded insulation levels reduce heat gain in summer and heat loss in winter, resulting in lower utility costs.
- Less electrical lighting and shaded southern elevations reduce the annual cooling load. Less air conditioning is needed to maintain comfort.
- A lower cooling load allows for smaller HVAC cooling systems.
- Ice is made at night and stored in large, insulated ice-storage tanks. The system then uses this stored ice during the day for cooling.
- Displacement ventilation supplies air to a space near the floor level with very low velocity, improving air quality, minimizing air-movement noise levels and saving energy.

What was the community response to the project being environmentally responsible?
The community response to the sustainable prototype has been overwhelmingly positive. As Marie Unger, one of the principals, has shared, "Our kids have been coming home at the end of their day with a new enthusiasm for taking care of our environment . . . children are demanding a home recycling program. We even have families who do not live within walking distance . . . and their children have requested a carpool to get them to school! A mom shared with me that her daughter wants to eat dinner by candlelight more often, to save energy."

Shakopee High School
Shakopee, Minn.
Architect: Wold Architects and Engineers

Green products and processes:
The sustainable design process for this building started by first reviewing what standard practices the district typically uses, and considering where even greater opportunities for green design existed. Through collaborative meetings with the district, school officials were able to gain a greater understanding of green practices they already were using and created a dialogue for exploring new strategies. The key areas evaluated were occupant comfort, energy performance and enhancement, and first-cost.

What are some unique green aspects of the facility?
- Environmental site assessment and wetland delineation.
- Stormwater-management plan for quantity and quality control.
- Reduction of light pollution in site design.
- Water-efficient plumbing fixtures.
- High-efficiency boilers and motors.
- CO_2 management of outside air delivery.
- Dual-speed gymnasium supply-air control.
- Integrated building-commissioning process.
- Digital building-automation controls system.
- No ozone-depleting refrigerants.
- 5 percent minimum recycled content in products.
- Acoustic design criteria used.
- Daylight to more than 90 percent of classrooms.
- Recycling and sorting room planned.



The student commons illustrates the central daylighted core and low-VOC-emitting materials, and uses a CO_2 fresh-air-management system. Photo courtesy of Aaron Holmberg/Holmberg Studios

Community response:
By far, the largest immediate impact for the community is the amount of available daylight. The building is organized around a large atrium student commons with daylight available from all directions. Classroom design focused on bringing daylight into all areas unless functional programming dictated otherwise. Occupant comfort and satisfaction also are noticeable, particularly from the teaching staff. Complaints regarding temperature fluctuation and construction odor have been minimal compared with previous projects. With increased efficiency in systems comes reduced energy costs, which will affect taxes for the community. The savings definitely have been noticed and monitored by the district.



aluminum windows

The commons area has clerestory windows providing daylight to the space, certified wood at the "tree" column roof structure and terrazzo flooring.

Regional and green materials:

- -Concrete, concrete block and brick.
- -FSC-certified wood trim, gym flooring and doors.
- -No-VOC carpet and flooring materials and adhesives, and low-VOC paint and mold-resistant paperless gypsum board.
- -Operable windows for natural ventilation.
- -Recycled building materials: fly ash concrete, steel structure, carpeting, ceiling tile, aluminum windows and wall fabric.

Sheyenne Ninth Grade Center
West Fargo, N.D.
Architect: YHR Partners, Ltd.

What are some unique green aspects of the facility?

The stormwater from roofs and parking lots is collected in a pond; this water is used to irrigate the fields and school lawn, diverting stormwater from the sewer system. The building has high-efficiency, dual-fuel mechanical boilers (gas and electric) and fresh-air ventilation with a heat-recovery system. Exhausted air exchanges its heat with the incoming fresh air to heat up the incoming air, reducing the energy required to heat the building in winter. Occupancy and photo sensors in rooms shut lights off automatically based on occupancy or daylight conditions.

Cool thoughts:

An ice-storage system was designed in the project so the chillers can make ice during nights (off-peak) while there is surplus electrical energy on the grid. Then the ice is used to produce chilled water to supply the air conditioning during peak daytime hours.

East Fairhaven Elementary School
Fairhaven, Mass.
Architect: HMFH Architects, Inc.

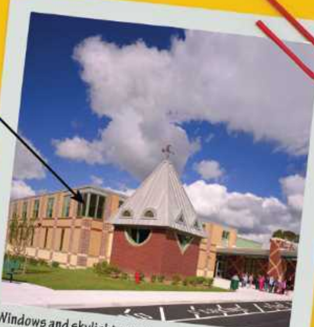
When planning this facility, what considerations were given to green products and processes?

The school is an example of economical design leading naturally to high-efficiency, green design. Extensive daylighting, coupled with automated dimming of artificial lights, provides a cost-effective solution for improving quality of life within the school while reducing energy use and cost. Building materials—from windows to flooring—were selected as much for their long life spans and inexpensive maintenance as for their superior heat efficiency and positive impact on IAQ.

Unique green aspects of the facility:

The school's daylighting system was planned carefully to interact efficiently with artificial light dimming sensors, provide daylight regardless of which configuration the flexible spaces are used in, and allow borrowed light to be shared via numerous internal windows.

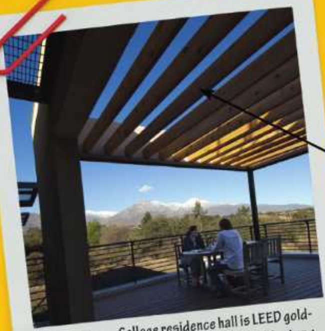
skylights and windows



Windows and skylights work with an automated dimming system to decrease the need for artificial light. Photo courtesy of David Lamb Photography

Footprint notes:

East Fairhaven's multi-use spaces reduce the building's size, cost and environmental impact. For example, the music classroom has been raised 24 inches above the gymnasium floor level, and when an auditorium space is needed, a wall between the two is folded up, transforming the music classroom into a stage and the gymnasium into auditorium seating.



shade trellises

The new Pitzer College residence hall is LEED gold-certified. Photo courtesy of Paul Hester/Hester + Hardaway

Green vibes:
Planned around an experiential courtyard, the project also includes cozy meeting nooks, shade trellises and overhangs that help make the complex green.

Pitzer College, Residential Life
Claremont, Calif.
Carrier Johnson + CULTURE

What are some unique green aspects of the facility?
Pitzer College recently was recognized as one of the first campuses in the United States to achieve LEED gold certification for all of its new residence halls. To achieve the rating, the project team applied scores of techniques and materials, including materials high in recycled content, solar photovoltaic cells, a central plant with energy-efficient heating and cooling, Dutch doors, a "rainwater recycling" system, native plantings and an extensive recycling program.

Things to do on campus:
-Recycle!

South Hackensack Memorial Elementary School, South Hackensack, N.J.
Architect: DF Gibson Architects, PC

What are some unique green aspects of the facility?
South Hackensack Memorial Elementary School is the first school in the state of New Jersey to use a direct gas-fired absorption chiller/heater. This technology is tremendously energy efficient, resulting in heating and cooling costs 25 to 35 percent less than electronically driven chillers.

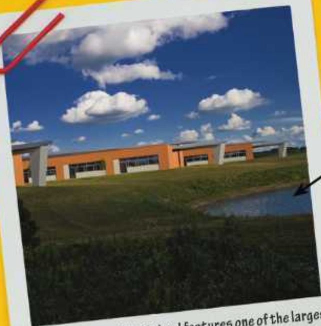
Interesting footnote:
Because the original "neo-classical" true divided light windows had been removed in an earlier renovation, the architect replaced the windows for acoustic purposes to restore them aesthetically consistent with the original.

energy efficiency



South Hackensack Memorial Elementary School uses a direct gas-fired absorption chiller/heater.

Cost savings:
-25 to 35 percent!



Colin Powell Middle School features one of the largest pond-based geothermal systems in Illinois.
Photo courtesy of Steinkamp Photography

Community response:
From the project's inception, the community was highly receptive to the building's sustainable features. As the project progressed, local newspapers, the school district newsletter and the village newsletter provided updates that touted the facility's energy efficiency. During construction, teachers, residents and students toured the facility and learned about its high-performance technologies. The village of Matteson was so pleased with the building that the facility rendering was placed on village vehicle stickers. When the school was complete, Colin Powell, its namesake and former secretary of state, made a surprise appearance and praised the school's innovative features.

Colin Powell Middle School
Matteson, Ill.
Architect: Legat Architects, Inc.

Green products and processes:
Energy efficiency and environmental awareness were driving factors in the design. High-performance technologies, such as the geothermal pond system, support the curriculum and position the school as a dynamic symbol of education to students and the community. The design team selected products based on their sustainable properties. For instance, the material palette combines brick for its low embodied energy, glass for its transparency, and metal and precast concrete for their recycled content and recyclability.

What are some unique green aspects of the facility?
-Daylight harvesting system brings natural light to 90 percent of interior spaces.
-Outdoor courtyards bring light and views into the building, and provide secure space for outdoor activities.
-Classrooms are grouped into three triangular volumes oriented in response to site features, solar orientation and views.
-Lightweight sloped metal roof plates over common spaces are angled optimally for future photovoltaic cells; clerestory windows bring more daylight into internal spaces.
-Passive security system keeps views open from nearly everywhere in the building.

Carrboro High School
Carrboro, N.C.
Architect: Moseley Architects, PC

Green products and processes:
Sustainable materials are spread throughout, from recycled carpeting free of toxic compounds to doors made from lumber from responsibly managed forests. More than 20 percent of the building materials were obtained from regional manufacturers. During construction, 99 percent of construction waste was recycled, avoiding disposal of 776 tons of waste in local landfills. An Energy Star-compliant, highly reflective roof membrane helps keep the school comfortable and reduces the facility's mechanical cooling load. Solar energy preheats water, greatly reducing the energy consumption of gas-fired boilers.

What are some unique green aspects of the facility?
-Three 35,000-gallon cisterns collect filtered rainwater for school toilets. This choice saves 1,250,000 gallons a year. Overflow water runs to a detention pond to water school fields.
-The school was built east-to-west to maximize natural light. Three-quarters of the building—classrooms, gymnasium, media center, cafe/commons—needs little to no artificial lighting.
-Efficient fluorescent lights supplement rainy days and nights, and sensors shut lights off when rooms are empty. With sloped ceilings and large clerestory windows, outside views are possible from virtually any point inside.



Three 35,000-gallon cisterns collect filtered rainwater for school toilets, which saves 1,250,000 gallons a year.

Community response:
Carrboro High's green building is rooted in Chapel Hill-Carrboro City Schools' "High Performance Building Design Criteria." One of the most progressive policies in the nation, it emphasizes energy conservation, water-use reduction, high-efficiency lighting, enhanced IAQ and acoustics. Collaboration with administrators, stakeholders, the community and project team members early in the design process was critical to identifying sustainable strategies and envisioning the school as a green building.



Tall windows draw light deep into the facility. Photo courtesy of James Steinkamp

Green goals:
A goal was established to beat the local energy code by 30 percent. In-floor and ceiling radiant heat provides thermal comfort in response to the special needs of the young learners and program activities carried out on the classroom floor. In addition, high-efficiency building systems were used throughout.

Brokaw Early Learning Center
Oswego, Ill.
Architect: DLR Group

When planning this facility, what considerations were given to green products and processes?
In order to optimize the energy efficiency and indoor environmental quality of the school, the project team incorporated a number of innovative, reliable, cost-effective and energy-efficient design technologies. The project includes energy recovery in the two air-handling units, in-floor radiant heat, high-efficiency condensing boilers, a high-efficiency domestic water heater, and is designed to meet the requirements of the ANSI 12.6 Acoustical Standard.

Unique green aspects of the facility:
Undulating gable roofs in each of the early-childhood-center living rooms allow natural light to penetrate all classrooms and more than 85 percent of the total building area. With atypically high ceilings in each classroom, windows are taller and draw natural light deeper into the classrooms.

Norwich University, Wise Campus Center
Northfield, Vt.
Architect: Perry Dean Rogers | Partners Architects

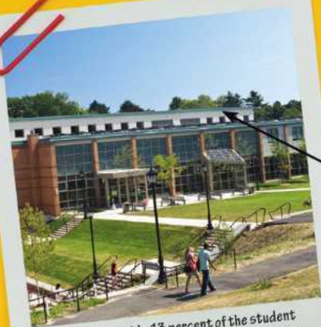
Green products and processes:
The design team worked closely with Efficiency Vermont, the state body that oversees energy efficiency of all projects in the state. As a result, the university received energy rebates from Efficiency Vermont for a number of the sustainable-design initiatives undertaken. Sustainable design began with initial building planning: orientation, appropriate overhangs and building massing, introduction of natural light, and high-efficiency mechanical systems.

What are some unique green aspects of the facility?
Beyond basic building massing, overhangs and efficient mechanical systems, the project uses a number of unique green strategies:
-A west-facing screen wall mitigates intense solar gain and glare.
-A ceramic frit is used at the curtainwall to further control solar load.
-North- and east-facing continuous clerestories provide natural light at the "seam" between the addition and the renovation of the existing building.
-A white roof and concrete pavers at grade provide high-albedo surfaces.
-Variable-frequency drives and a hood-ventilation system maximize the efficiency of the kitchen operation.
-The contractor recycled 96 percent of the construction waste.



The west elevation has an overhang shading the lower floor and a west-facing screen wall shading the main dining hall. Photo courtesy of Richard Mandelkorn

Community response:
Efficiency Vermont provided upfront subsidies in support of some specific measures (i.e. use of super-T8 bulbs), and ongoing rebates on energy costs thanks to the improved efficiency of the building. The local community also was keenly interested in the environmentally responsible aspects of the project, and this was a central talking point at public town-hall meetings.



Solar panels provide 13 percent of the student center's electricity. Photo courtesy of Robert Mintzes

Community response:
This is the first green building on the Manhattanville campus. The approval process within the local community was made more cordial because the building was designed to be sustainable. The Manhattanville community of faculty, staff, students, families and alumni is genuinely excited about the sustainable building. The solar collectors are visible from the new quadrangle, clearly indicating the presence of a green building in the landscape.

Manhattanville College, Student Center
Purchase, N.Y.
Architect: Peter Gisolfi Associates Architects • Landscape Architects • Interior Architects

When planning this facility, what considerations were given to green products and processes?
All of the materials in the building have been obtained locally. They are natural and non-toxic. The primary exterior materials are brick, glass, metal panels and standing-seam metal roofing. The interior materials are polished concrete flooring, maple flooring, ground-face concrete block interior walls and partitions, brick pavers, and unfinished galvanized steel doors and frames. The interior surfaces essentially are unfinished for minimum maintenance and no toxic off-gassing.

What are some unique green aspects of the facility?
-In order to receive LEED gold certification, the building incorporates an energy-efficient, gas-fired condensing boiler; an efficient evaporative chiller; and a well-insulated building envelope.
-Roof-mounted PV solar collectors provide 13 percent of the building's electricity.
-All interior space is daylighted.
-The building uses 50 percent of the energy of a typical code-compliant building.
-The extended west facade forms the edge of a new quadrangle. That facade is glass, but the overheating associated with west-facing glass is remedied with fritted glass and a row of deciduous trees, which shades the glass during the warm season.

University of South Carolina, Arnold School of Public Health, Columbia, S.C.
Architect: The FWA Group, Architects

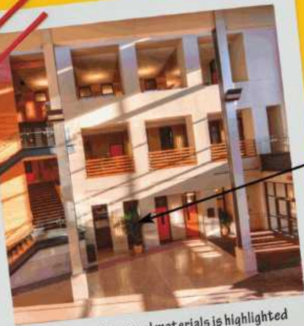
Green products and processes:
The design and construction of a green building was the shared goal of the university, architect and contractor. Consequently, green building products were considered for use in the building at every stage of planning and directly influenced design decisions. Particular attention was given to the selection of local and regional materials, low-emitting materials and energy-efficient HVAC systems. The life-cycle cost analysis and maintenance considerations helped steer the design team to make important material and product selection decisions.

Unique green aspects of the facility:
The window openings were optimized for the effective use of daylight through the appropriate selection of glazing and shading control devices. Studies to determine the correct amount of visual light transmittance and solar heat-gain coefficient allow the windows to perform dual functions. This includes maximizing daylight through a clear transom, and controlling the light entering through the lower view portion of the window. Interior mounted reflectors in the transom project natural light farther into the rooms, and exterior sun shades eliminate glare at the work surfaces. Adjusting the HVAC requirements and using lighting-control monitors with this system reduce energy use.



Interior mounted reflectors in the transom project natural light farther into the rooms, as seen in this laboratory space.

Community response:
The University of South Carolina is emerging as a leader in sustainable design of buildings in the state of South Carolina. The Arnold School of Public Health was its second project targeted for LEED certification, and the first of the new Innovista Research campus expansion. The success of this project has reinforced the university's goal for green buildings and established a standard for sustainable design and construction moving forward.



The rich fabric of natural materials is highlighted with sunlight in the main atrium and lobby. Photo courtesy of Jonah Garoutte/MSKTD

Ball State University, David Letterman Communication and Media Building, Muncie, Ind.

Architect: MSKTD & Associates, Inc.

When planning this facility, what considerations were given to green products and processes?

While the highly acclaimed College of Architecture and Planning program at Ball State University has been committed to sustainable design for decades, the university strategic plan, adopted in 2007, has pledged that all new construction shall meet LEED requirements. This facility is the first campus building designed to meet LEED standards; it is on pace to achieve LEED silver certification.

What was the community response to the project being environmentally responsible?

Students and faculty not only have raved about the design and environmental stewardship, but also have flocked to this building. The architect has given tours of the facility at the request of faculty, students and community members. The building even caught the interest of U.S. Senator Richard Lugar; he awarded the university the Lugar Energy Patriot Award and praised the environmentally progressive design of the facility.

What are some unique green aspects of the facility?

-Natural light filters deep into the core of the facility thanks to a 3½-story atrium cutting through the entire length of the building.
-High-efficiency systems, water-conserving fixtures and recycled/recyclable materials were used throughout the building.
-The design also includes exposed steel, aluminum trim, warm tones for terrazzo, and elegant use of bamboo on floors, walls and doors.
-All specialty acoustic trim was custom-milled from bamboo.
-Eco-friendly ceramic tile, carpet and rubber flooring contain recycled materials, but also are recycled easily.
-Low-VOC finishes, and living bamboo plants and palm trees add to the green environment of the building.

Birmingham Elementary School Upgrades Birmingham, Mich.

Architect: TMP Associates

When planning this project, what considerations were given to green products and processes?

Green/sustainable elements include:
- Use of low-VOC paints.
- Use of low-VOC carpet and other flooring materials.
- Use of low-VOC sealants.
- Constructed with a large amount of recycled steel.
- Building materials are durable, low-maintenance and recyclable.

Sites upgraded:
- Beverly Elementary School
- Greenfield Elementary School
- Harlan Elementary School
- Pembroke Elementary School





Upgrades were necessary at four Birmingham elementary schools. Photos courtesy of Christopher Lark Photography



natural light

An exterior screen wall shades the main lobby space.
Photo courtesy of Timothy Hursley

Community response:
The design team worked with the university facilities group to establish energy goals for the project. The user groups also were engaged and interested in the environmental responsibility of the project. User groups also were focused on the long-term flexibility of the building. The underfloor air, audiovisual, information technology and power systems, and demountable wall systems allow for programmatic flexibility. This added upfront cost is offset by the long-term return on investment, and reduction in embedded energy and construction waste of future potential changes.

University of Arkansas—Fayetteville, J.B. Hunt Transport Services Center for Academic Excellence, Fayetteville, Ark.
Architect: Perry Dean Rogers | Partners Architects

Green products and processes:
The design team worked closely with the university facilities group to provide a building that would work well for its ongoing operations and maintenance practices while achieving aggressive energy-reduction goals. Initial building planning considered orientation, appropriate overhangs and building massing, introduction of natural light, long-term spatial flexibility, and high-efficiency mechanical systems.

What are some unique green aspects of the facility?
-A south-facing screen wall mitigates intense solar gain and glare while allowing natural light into the main lobby atrium space.
-A series of skylights drops natural light into the deep main-floor footprint, activating the main circulation spine.
-Underfloor air delivery is used throughout the building, allowing for more efficient air delivery and long-term flexibility of the building systems.
-Many internal walls are demountable systems, also in the interest of ongoing programmatic flexibility.

Nation Ford High School Fort Mill, S.C.
Architect: Moseley Architects, PC

Green products and processes:
Fort Mill's Board of Education chose not to formally pursue LEED certification, but many sustainable features were incorporated into the design and construction. An emphasis on sustainable daylight and view qualities immediately appealed to the district board of trustees. In addition, the facility was designed to respect the environment, deliver energy savings, and promote student performance through reduced site disturbance; reduced heat-island effect for the flat roof; use of local/regional materials; water-efficient landscaping; and system controllability with operable airflow, temperature and lighting.

Local flavor:
Several architectural elements uniquely incorporate green, sustainable strategies and the community's textile mill heritage. Following the textile mill architecture of South Carolina, and drawing from local manufacturers and installers, the school's brick exterior complements 75 acres of stubborn, sloping red clay and piney woods. The facade is punctuated by ground-face block and glass entrances that simulate the historic mill tower and, with the glass and curtainwall entrances, promote the aesthetic feel of technology and the "promise of the future" for students.

flat roof



The design of Nation Ford High School follows the textile mill architecture of South Carolina by drawing from local manufacturers and installers.
Photo courtesy of Brian Dressler

What are some unique green aspects of the facility?
Natural light is harvested through rhythmic placement of windows and clerestories—more than 16,000 square feet of glass. Southern exposure is minimized by louvered sun shades.



The use of the addition has increased dramatically for educational and community programs.
Photo courtesy of Bill Henry

Green future:
Efficiencies throughout the entire project resulted in significant cost savings, which may fund a 50 kW solar photovoltaic panel system that the school district is considering to offset electrical energy consumption.

Badger High School, Art and Fitness Addition, Lake Geneva, Wis.
Architect: Kehoe-Henry & Associates, Inc.

When planning this facility, what considerations were given to green products and processes?
The project was delivered under a negotiated general contract with design-build HVAC and electrical subcontractors. The general contractor exceeded its recycling goal and provided value engineering on various recycled-content material selections. HVAC and electrical components are controlled by an integrated energy-management system that makes the facility one of the most efficient in the state.

Unique green aspects of the facility:
The south-facing addition features a large curtainwall that provides daylighting, as well as views of the athletic fields and adjacent state park. Integral shading devices reduce heat gain in summer, but allow in the warmth of the sun during winter. Flooring high in recycled content includes VCT in some art classrooms and rubber sports flooring in the cardio/fitness center. The two-story addition has a 15,000-square-foot footprint and was placed so that no additional impervious surfaces were added to the site.

University of Southern Maine, New Residence Hall, Gorham, Maine
Architect: Harriman

Green products and processes:
LEED silver was a goal established for this project prior to design. Sustainable materials such as FSC-certified wood were critical to the commitment to green design and were incorporated into the project regardless of the contribution to the LEED credit. Another aspect that was necessary to incorporate in the design is an ongoing sustainable-education program for residents. Interactive computer monitors are displayed in the lobby to inform residents of the building's energy consumption and challenge them to compete to improve conservation.

Uniquely green:
The architect worked with Boyd Aluminum during the design phase to improve the window anchoring system to provide a better installation to the air-vapor barrier and improve the thermal performance of the building envelope. Boyd Aluminum redesigned its window installation system and fabrication process, which results in a better seal at the window perimeter to decrease air infiltration, and therefore results in less energy use and increased comfort for building occupants.



Although the building has many green features, one unique aspect relates to the window design and installation.

Community response:
The University of Southern Maine requires that all new buildings meet LEED certification standards. However, the overwhelming desire of the campus community was to go beyond the minimum LEED requirements and strive for silver certification (the project has achieved silver and is currently waiting for review of final documents for LEED gold). The energy that the campus community had surrounding sustainable design was incredible, and it was challenging the design team constantly to find ways to enhance the design to incorporate more sustainable features.



Solar shading helps control glare at Green River Community College. Photo courtesy of Steve Keating Photography

Community response:
The science center was designed to support the college's mission to create a vibrant identity and more engaging campus experience. Working with faculty to brainstorm translatable scientific principles, the designers crafted elements that were both identifiable scientific concepts and enriching design features:
- Newton's second law of motion.
- Geological strata.
- Weather, seismography and cosmic rays.
- Greenhouse.
- Green touchscreen.

Green River Community College, Marv Nelson Science Learning Center, Auburn, Wash.
Architect: DLR Group, Design Architect S.M. Stemper Architects, Architect of Record

Green products and processes:
The college envisioned a building that supports and celebrates science education and sustainability. Using Labs 21 concepts, the team developed and carried out strategies that beat local energy-code requirements by 30 percent, resulting in a Puget Sound Energy Grant. The design integrates durable materials appropriate to science laboratory conditions; and uses regionally available products; low-emitting materials and recycled materials, including marmoleum and concrete flooring, composite board wainscoting and accents; and tackable surfaces composed of recycled rubber for display use.

What are some unique green aspects of the facility?
The building plan places labs at the center of the building. This enabled the team to stack them vertically in ascending order of complexity, significantly reducing the amount of ductwork. The organization of the building allows the labs to share utility systems, creating more efficient and effective operation of these systems. The building's adjacency to the Technology Center enables both buildings to share select mechanical systems. All insulation on ductwork and piping exceeds local energy-code requirements. A manifold exhaust system was used in lieu of exhaust fans for each laboratory fume hood. The lab ventilation system uses a heat-recovery system for all fume-hood exhaust, enabling the system to capture heat while exhausting pollutants, and working as either a heat source or heat sink as conditions warrant.

Washtenaw Community College, The Health & Fitness Center, Ann Arbor, Mich.
Architect: Ohlson Lavoie Collaborative (OLC)

When planning this facility, what considerations were given to green products and processes?
The design team gave the highest level of consideration to green products and processes by adhering to LEED gold standards within the five environmental categories for certification. By incorporating many sustainable and renewable features and products throughout construction and interior design, and selecting all materials in a conscious effort, the college set a responsible and eco-friendly example that represents the awareness level of the greater Ann Arbor community.

What are some unique green aspects of the facility?
- Built on the site of a former soccer field and just yards away from the Huron River, the center abuts the 35-mile Washtenaw County Border-to-Border trail, ideal for walking, jogging and bicycling.
- Pervious pavement in the parking lot allows rainwater to soak back into the soil naturally.
- Landscaping uses native plants that require little or no irrigation.
- Reflective white roof to reduce heating and cooling requirements.
- A central boiler unit uses recaptured heat, and room-monitoring sensors makes adjustments for temperature control.
- A large five-lane lap pool and a warm-water therapy pool feature water that is recycled with the aid of appropriate filtering systems. Harsh chemicals are eliminated from the pools with a salt chlorination system that uses carbon dioxide to balance the acidity and alkalinity.



The gymnasium features a resilient wood floor constructed of maple wood planks. Photo courtesy of Chris Burkhalter Photography, LLC

What was the community response to the project being environmentally responsible?
An education program was developed to present the project's sustainable-design practices to occupants and visitors to the facility. The program featured two educational components, including a published brochure describing the project's design features and the LEED program, and public tours.



Net zero will be achieved largely through the use of a photovoltaic system installed on the roof of the building.

What was the community response to the project being environmentally responsible?
The community response to the project encouraged the team to incorporate the building's green processes into the curriculum. This will enable students to learn environmental stewardship firsthand, seeing and understanding the building's design and its regional, national and global impact. The building's hallways are themed with interior design cues that reinforce the district's energy-conservation goals and strategies such as geothermal and solar energy.

Richardsville Elementary School
Bowling Green, Ky.
Architect: Sherman Carter Barnhart

Green products and processes:
In the early phase of the design process, the Warren County Board of Education decided to design Kentucky's first net-zero-energy school, a facility that, when in operation, will generate on-site the same amount of energy it consumes annually. Net zero will be achieved largely through a photovoltaic system installed on the roof of the building. The project also will be LEED-certified.

What are some unique green aspects of the facility?
With an emphasis on energy conservation and sustainability, the facility incorporates the following green aspects to support Warren County's net-zero goal:
-The building uses insulated concrete form (ICF) wall construction, which provides a high-performance envelope that requires much less energy to heat and cool.
-A geothermal HVAC system featuring CO_2 monitoring and distributive pumping further reduces energy consumption.
-Active daylighting reduces artificial light loads and helps provide a healthful classroom environment.

continued ...

Green learning:
The solar-energy hallway incorporates a sun-inspired floor pattern that leads students to a computer battery-charging station, monitoring in real time the amount of solar energy required to charge the school's laptop computers.

In the geothermal hallway, the piping system is exposed and color-coded, with temperature sensors attached to the supply and return lines of the well field. Students can trace the piping system and monitor seasonal changes affecting the performance of the well field with information collected by a terrace-mounted weather station.

Site sense:
-The building is a compact two-story design oriented north-south for daylighting and solar strategies, and built into a hillside, which together reduce the impact on the natural site.
-The site design uses bio-swales planted with local grasses and vegetation that filter stormwater runoff from the roof and parking lots.

Green product:
Soy-based concrete stains provide a healthful, environmentally friendly floor finish while reducing maintenance (in man-hours), equipment energy consumption and cleaning products.

For more information about the projects featured in this Field Guide, please refer to their individual Architectural Portfolio pages in this issue:

CONSTRUCTION GUIDE



CONTENTS

A special section in AMERICAN SCHOOL & UNIVERSITY





The new $44 million, 91,598-square-foot Kinesiology and Athletics Building at Humboldt State University, Arcata, Calif., features educational spaces, labs, health programs and a spacious, modern arena. (Architect: Yost Grube Hall)

A Paradigm Shift

Design-build can deliver high-quality design and construction for education institutions.

By Miles Woofter

Planners and administrators at colleges and universities across the country face a daunting task: how to complete renovations or build new facilities in a tumultuous and challenging economic climate. We cannot expect that wholesale improvement will come quickly, but the need to improve facilities is a pressing reality.

Residence halls, classroom buildings, research facilities and athletic centers need to be built, and existing facilities need upgrades in order for these institutions to serve society and create 21st-century learning and living opportunities. The design-build approach to design and construction has resurfaced as an efficient and cost-effective deliv-

ery for projects facing schedule and budget constraints. This approach differs substantially from the more prevailing "hard bid" or design-bid-build delivery methodology. But it is a methodology that meets tight schedules and budgets, and campus planners should consider it for high-quality design and construction. Design-build can exceed the expectations of an education institution, and its faculty and students.

Defining the process

Design-build is a contract methodology with a single contract between the education institution and the entity that provides all the design and construction services. It contrasts with traditional delivery, which depends on multiple contracts. In terms of overall benefit, industry research has shown that design-build can provide a school with an expedited schedule that often results in a lower cost, faster completion and higher quality than the two prevailing delivery approaches—design-bid-build and construction manager/general contractor (CMGC).

Why choose design-build? A few key reasons:

•**Design-build partnership.** When executed properly, it engenders a common commitment to success. By its nature, the process brings the designer and builder—all parties, in fact—together, early on, under one contract. This establishes a consensus on goals and priorities, and builds relationships. It also fosters collaboration and voluntary problem-solving. Parties are motivated to address issues rather than point fingers or assess blame. From a school's perspective, the process can eliminate or avoid design and cost issues that often hinder projects.

> **With design-build, quality is a shared goal and becomes achievable as a result of the mutual commitment and dedication among all partners.**

•**Continuous improvement.** Design-build allows for design as a continuum. In other words, it facilitates continuous refinement and improvement in collaboration with a construction partner. Because design and construction are integrated tightly, they are, by default, more productive and effective.

The process enables all parties to interact effectively early on—designers, contractors and sub-contractors meet right from the start. The design team and process is better suited to eliminate unplanned adjustments or fixes, and make the project better, while still meeting overall school design and construction goals and schedules.

•**Teamwork resolves issues rapidly.** Because design-build fosters teamwork and collaboration among design and construction team members, it encourages effective solutions that balance design, construction cost and schedule. With design-build, the entire team is motivated to suggest ways to solve a problem and to identify the right solution given all considerations. The result, often early in the design or during construction, is a quick resolution that saves costs and keeps the project moving.

•**Quality assurance.** With design-build, quality is a shared goal and becomes achievable as a result of the mutual commitment and dedication among all partners. The school wants a facility that meets the needs of its users; responds well with other structures and aspects of the campus or the context; meets specific school project standards; is delivered on time and on budget; and functions at a high level over its expected life cycle.

The process ensures that a designer delivers quality as reflected in the appropriate space plan, the interior and exterior materials chosen, the architectural details and sustainability features. It further motivates the contractor and subcontractors to produce excellence in everything from permitting, site-staging preparation and construction, to project closeout.

Managing expectations

It falls to the designer and builder professionals to deliver projects that meet an institution's requirements, on budget and schedule with the assurance of quality design and construction. With the designer and contractor working under one contract with a collaborative, engaged school, all parties are motivated to create an optimal plan and to study the appropriate solutions to design and construction challenges. This results in a new or revitalized building or campus in which all participants can take utmost pride. ■

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A master plan at the University of Southern Maine/Lewiston-Auburn College Campus will help meet the growing needs for this campus. It has grown piece by piece over the past 17 years in the existing facility, which is housed in a converted indoor tennis building.

Attainable Goals

Breaking down a long-term master plan can help streamline short-term decisionmaking.

By Robert C. Klinedinst Jr.

Master planning identifies long-term ways to improve and expand a campus. The end product typically is a beautifully rendered campus site plan showing enhancements to green spaces, improvements to vehicular and pedestrian circulation paths and parking, additions to existing buildings, and new buildings. These plans imagine what a campus could become in the future. But the improvements don't happen overnight, and the costs involved often exceed available funding resources.

Campus planning is worthwhile, but it is important for schools and universities to develop realistic and achievable goals.

The long and short

A short-term master plan provides a picture of what is likely to happen in the next 10 years. It helps streamline decisions and gives the campus community a good idea of what to expect. Break down a long-term campus plan into pieces that can be funded more easily:

•**Focus on short-term goals.** Developing a short-term master plan requires agreement on priorities and upcoming decisions. Often, these activities are not done until after the master-planning process is complete and funds have become available for the next project. In that case, different expectations on campus become apparent very quickly, and the process ends up taking much more time.

A plan with smaller, more attainable steps will help identify which projects are most beneficial and achievable given available or probable funding. It also will provide an objective framework for deciding about future projects so the process doesn't have to be repeated again when additional funding becomes available. This approach requires setting priorities and making decisions throughout the master-planning process. It isn't something that can wait until the end.

•**Develop priorities.** As part of the initial data-gathering, students, faculty and staff need to categorize and prioritize each of their requests. This often results in a better understanding of needs and how they can be funded. Requests can be categorized as a quantitative or qualitative space need, location or adjacency issue, equipment need or physical-plant need. Categorizing will help determine if work can be done within existing budgets or if significant fund raising will be required. Identifying quantitative space needs often leads to an analysis of existing space utilization to determine if those needs can be met with existing space or if new space is necessary.

Requiring that requests by students, faculty and staff be prioritized signals to those groups that resources are limited. This leads to a better

understanding of what is most important to each department and results in fewer unrealistic wish-list items. A final master-plan document that clearly categorizes and prioritizes the needs of each department will result in much easier decisionmaking. It also provides a tool that can be updated on a regular basis.

•**Identify what works.** Another important part of initial data collection is finding out what works well on campus and shouldn't change. Too often, data-collection meetings become negative, focusing only on things that don't work. The master-planning process also can be an opportunity to confirm what works well on campus and is important to the institution. This exercise also provides valuable information to master-planning consultants that have a limited amount of time to gain an understanding of the institution. Knowing what is successful on campus also helps administrators as they decide the future of a campus.

During the analysis phase, the master-planning committee also must consider an institution's strategic and academic plans. As the committee develops its system to prioritize projects, it must have a clear understanding of the institution's mission, where it wants to go, the most urgent issues on campus, and where the existing campus and facilities come up short in supporting its mission and goals. This process will help to prioritize all of the work done by each department and focus on the institution as a whole. The result will be a listing of the most critically needed work.

•**Ask the right questions.** An approach that helps categorize projects is to develop a list of questions to ask about each request or project. Each question should be based on a goal in the strategic or academic plan. Such a list could include the following questions:

-How many individuals will be affected?

-Will student attraction and retention be improved?

-Will faculty and staff attraction and retention be improved?

-Will productivity be improved?

-Will energy be conserved or costs reduced?

-Will security or privacy be improved?

Requiring that requests by students, faculty and staff be prioritized signals to those groups that resources are limited.

-Will safety be improved or health risks diminished?

-Will the chances of losing property be reduced?

-What is the source of the funding?

Having a clear understanding of funding sources or mechanisms is critical. Funds can come from multiple capital budgets, technology budgets, accessibility budgets, various committee budgets, as well as money raised from alumni and other donors through development offices.

Meeting with individuals who are responsible for those funds or budgets will help the committee understand which funds are available and the criteria for funding decisions. Meetings with the development office also can help the committee understand the role of existing or future capital campaigns. Matching each request to the appropriate funding type and sharing those lists with the various decisionmaking groups will help focus and facilitate the process.

•**Classify projects.** The next step is to classify all projects into four categories:

-Critical or urgent with available funding.

-Important and necessary with probable funding.

-Campus quality-of-life improvements with unsure funding.

-Improvements with no funding available.

The short-term campus master plan is developed based on projects in the first two categories: critical or urgent with available funding, and important and necessary with probable funding. Knowing which projects are realistic and achievable, the master-planning committee then can focus its efforts on creating an effective plan that meets those needs.

•**Communicate the plan.** Through this process, high-priority work that is realistic and achievable can be illustrated in a short-term master plan and communicated to the campus community. The short-term master plan will make clear to the campus community and others what will take place on campus over the next decade. This results in less anxiety on campus about the timing and impact of projects.

Rallying support

All of the decisions made to establish a short-term plan will serve as backup for supporting or justifying the plan in the event that questions are raised. Taking this stepped approach will result in more useful and effective master plans; it enables administrators to address short-term needs more quickly, which will help facilitate the development of visionary long-range master plans. ■

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It is imperative that schools and universities adopt practices to reduce risk from student transportation.

Risky Roads

Schools and universities can manage transportation liability with smart practices.

By David Stevenson

A business that depends on a fleet of vehicles to deliver its products or services to customers usually recognizes the risk that comes with driving from one place to another. To an organization that does not see movement as part of its main mission, however, the need to consider transportation liability may be less obvious. In today's litigious environment, ignoring or underestimating the level of risk involved with transportation can be a costly mistake.

Schools and universities, in particular, have multiple exposures that should not be overlooked by risk managers. These may include a football team with dozens of players and coaches that travels by bus to

games, a simple excursion in which a teacher drives a student to a local event, or transportation outside the country for overseas programs.

By working closely with their risk-control experts, education institutions can take steps to make sure they are covered adequately whenever students or staff members are on the move.

Areas of risk

A few examples are useful in illustrating the wide range of transportation risks associated with schools and universities:

•In March 2007, Bluffton University in Ohio sent its baseball team on the road to a tournament in Florida. The bus driver missed a stop at the top of an off-ramp in Georgia, turned too fast on the overpass, and flipped the vehicle onto the freeway below. The crash killed the bus driver and his wife, and five players; 28 teammates were injured.

•The same year, two U.S. students attending an overseas program in Panama were injured seriously when the car they were riding in plunged off a winding mountain road.

•In April 2008, a journalism student at Southern Illinois University was on his way to a photo assignment for the student newspaper when his car was rear-ended by a truck. He died in the resulting four-vehicle pileup.

•In June 2008, five middle school students were injured when the bus in which they were riding home was rammed by a truck that did not stop at an intersection. Just five weeks before, the same bus—driving the same route with the same children—was hit by a vehicle whose driver died in the crash.

In cases like these, a school or university needs to be concerned about the legal aftermath. Liability for these and other types of accidents usually is sorted out long after the actual incident. But as institutions with relatively "deep pockets," schools and universities can find themselves at the center of claims and lawsuits even when they take precautions and follow careful risk-minimizing steps.

Typically, a case for liability can be made from several perspectives. For example, if the school or university owns a vehicle involved in an incident, it is likely to be responsible, regardless of who is driving. Similarly, in terms of connection to the institution, if a student or an employee of the education institution—such as a coach, faculty member or administrator—is the driver, then regardless of who owns the vehicle, there could be some level of responsibility on the part of the institution.

In addition, when a non-education-affiliated driver, such as a parent, uses a private vehicle, there is still a case for liability if the destination is a school-sanctioned event. Even when a school contracts with a company, such as a shuttle service for on-campus or campus-to-town trips, the school still can be held accountable for the arrangements it has made in trusting the vendor to be responsible and safe.

Federal warning on 15-passenger vans

Over the past six years, the National Highway Transportation Safety Administration (NHTSA) repeatedly has issued safety advisories about 15-passenger vans, recommending extra caution when they are used to move large numbers of people at once. Federal studies have shown 15-passenger vans have a tendency to roll over at three times the rate of lightly loaded vehicles when fully loaded. In fact, NHTSA data shows that 1,111 people died in crashes involving 1,576 of these types of vans between 1990 and 2002.

In its 2008 advisory, the NHTSA urged those who use the vans to:

•Keep the passenger load light.

•Check the van's tire pressure frequently, because improperly inflated tires can increase the chance of a rollover crash.

•Require all occupants to wear seatbelts (80 percent of those who died in 15-passenger van crashes were not buckled up).

•Avoid placing any loads on the roof and, if possible, seat passengers and place cargo forward of the rear axle.

•Pay attention to speed limits and road conditions.

•Use only qualified drivers.

The NHTSA said that the number of deaths has declined steadily since the federal agency's first warnings in 2002. Van owners have become more aware of the dangers. Nonetheless, crashes involving 15-passenger vans claimed the lives of 58 people in 2006.

Limiting risk

A 2006 insurance industry study identified motor-vehicle lawsuits as one of the top reasons that casualty costs are soaring for those found liable. Thirteen out of the top 100 lawsuit awards across the country in 2005 were attributed to decisions in vehicle crash cases.

On moral grounds alone, education institutions want to avoid having students and employees injured. Throw in the rising costs of liability, and it becomes imperative that schools and universities adopt practices to reduce risk from transportation. Some steps to consider:

•**Safe drivers.** It is the institution's responsibility to examine the qualifications of those who will be driving on its behalf. Drivers should have appropriate licenses for the vehicles they are assigned; they should have a good driving record; and they should complete a safety-training course either as designated by or provided by the institution. In addition, universities should avoid having students as

Even when a school contracts with a company, such as a shuttle service for on-campus or campus-to-town trips, the school still can be held accountable for the arrangements it has made in trusting the vendor to be responsible and safe.

drivers. Because of the lack of experience and the statistically high rate of accidents for this age group, young drivers cannot be depended upon to react correctly in unsafe or challenging driving conditions. By having a careful vetting process in place, a school or university can demonstrate that it has taken appropriate care in handling its transportation driver responsibilities.

•**Safe vehicles.** Properly maintained vehicles are much safer than those with worn tires and poor mechanical functioning, so it is important for any vehicles owned by institutions to be kept in good working condition. In addition, schools and universities should adhere to all federal safety guidelines, including recommendations for avoiding overloaded conditions, tire inflation standards and other safety factors. For those vehicles equipped with seatbelts, the institutions should require passengers to be buckled up before the vehicle is put into motion.

•**Qualified contractors.** A school or university may choose to contract transportation services as one way of transferring liability. However, the institution needs to review the contractor's practices in terms of driver and vehicle safety to ensure its standards are met. The institution also should require proof that the vendor carries adequate liability insurance and names the school as an additional insured party.

•**Risk releases.** In addition to ensuring that vendors are covered for risk, institutions also should communicate clearly about potential dangers and, when feasible, obtain informed-consent releases. Releases do not absolve institutions of responsibility, but they are an important documentation of the institution's good-faith effort to provide adequate warning about possible problems.

•**Appropriate insurance coverage.** Because of the increasing cost of claims, schools and universities will want to confer with their insurer about policy limits. Although normal commercial auto coverage typically carries a million-dollar limit, excess casualty coverage can be obtained with limits of up to $25 million or more.

Student and employee transportation can be a serious liability risk for education institutions—but traveling beyond school grounds often is one of the most enriching aspects of school and university life.

Institutions need not avoid transportation. Instead, they should create a management approach that sets standards, documents compliance and communicates clearly with all of those involved. By taking these steps and obtaining appropriate insurance coverage, they can manage the risk and still offer the opportunities that travel provides their students and employees. ■

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An effective campus plan requires a careful analysis of the campus and how land use fits into the overall planning strategy. (University of Massachusetts Amherst)

Inspired Landscapes

Turning tired campuses into classic spaces.

By Robert Brandon and Arthur Spruch

There's something about a college campus that captures the imagination. For many, it stirs images of charming brick buildings framed by classically inspired columns; for others, the ideal campus is an oasis of stately buildings situated in the midst of urban bustle. The lure of the campus is so strong that over the years, many of the brightest lights of the design world—from Thomas Jefferson to Frank Gehry—have been inspired to put their stamp on American colleges and universities.

It has been nearly 400 years since Harvard College was created, and since then, thousands of colleges and universities have been built across the United States. From the classically inspired lines of Thomas Jefferson's University of Virginia to the Spanish architecture at Stanford University, every campus has its own personality.

It's not unusual, however, for that

personality to become diluted over time. A campus' character evolves through the years as new buildings are erected and roadways created. Sometimes, development is undertaken in a haphazard, case-by-case manner. When development isn't handled strategically, the campus can begin to take on a jumbled, ad hoc feeling.

This is particularly true of campus landscapes. For instance, it isn't unusual for students to create their own shortcuts from residence halls to classroom areas; before long, those shortcuts become well-worn pathways. In response, universities often will pave these pathways, turning them into formal walkways. Although it may seem to make sense to accommodate students in this way, this practice can have the unintended result of undermining the architectural cohesion of that part of the campus. If universities pursue this type of unplanned development too often, their campuses can become a jumble of facilities and walkways that diminish the campus' image, utility and livability. Many universities have learned this lesson the hard way and find themselves trying to undo decades of chaotic landscape development. A number of schools are initiating landscape facelifts to create more attractive, productive and livable environments.

The first step for colleges or universities trying to make better use of their land is a careful analysis of the campus and how land use fits into the overall planning strategy. An effective campus landscape-improvement plan is part of this process; it will enhance functionality and aesthetics, promote a stronger sense of community, and forge a stronger bond among students, staff, visitors and the campus itself.

Gathering spaces

College and university campuses typically feature numerous gathering spaces. Some are campuswide destinations, and others are more private, residential courtyards. Ideally, these spaces, taken together, will offer students a variety of settings: quiet and private places for sitting and reading, as well as spaces for recreation and interaction with fellow students.

Schools can create appealing gathering spots by expanding seating amenities or altering those that discourage social interaction. Improving access points and eliminating vehicles from open spaces enable students to have a sense of ownership and safety toward an area. Additionally, gathering places that are perceived as cold and uninviting because of excess pavement can be improved with appropriate plantings. The addition of Wi-Fi also can entice students to use the space.

> The landscape should be a common thread that weaves throughout a campus, creating a pleasant and unified pedestrian experience.

Landscape modifications can improve the appeal of a campus. For example, in the Southwest Residential Area at the University of Massachusetts Amherst, broad lawns along University Drive offer a welcome, bucolic contrast to the urban character of the Southwest complex and underscore the experience of arriving on campus. Because ground-floor residences in the complex lacked screening from outdoor activities, and because the landscape generally is devoid of color during the winter months, tall evergreen trees were added to soften the look of the entire area.

This is a strategy that can be used on any campus that experiences long, cold winters. Evergreens can provide color and warm up bleak, winter landscapes.

Which way to go

Many colleges and universities do not define pedestrian routes clearly. When this is the case, students often create their own routes across campus grounds. Schools can ease this problem with more direct walkway connections and universally accessible routes.

Even more serious circulation problems can result from conflicts between pedestrians and vehicles. On any campus where pedestrians and vehicles travel near one another, there is the potential for conflict. Universities should provide clearly distinguishable roadways and walkways for each. They must be well- marked so pedestrians and drivers use them correctly.

CONTINUED ...



Paved plazas that are perceived as being cold and uninviting can be made more inviting and functional through the strategic addition of varying types of vegetation. (University of Massachusetts Amherst)

For instance, not many pedestrians have been using a tunnel at the edge of UMass' Southwest Complex. Campus officials plan to improve the walkway's sightlines, lighting and signage, and enhance the connections to major pedestrian routes and destinations. As a result, students will have a better understanding of how to use the walkway appropriately, and they will be able to avoid busy roadways when walking to and from their classes.

Many older buildings lack an "architectural identity" at the ground floor. This can confuse students, who may not be sure where to find the building's entrances. Adding better entry canopies and signage can help these buildings establish an identity. Canopies constructed with sides can provide added protection from the weather.

Universities and colleges also can mitigate the dangers associated with service-vehicle travel on campuses. Inadequate roadways and parking can cause service operations to suffer; insufficient turning space at curb cuts can make it difficult for service vehicles to maneuver; and service points often conflict with pedestrian routes.

To answer these challenges and operate more efficiently, universities should create coordinated delivery procedures for all departments. It also may make sense to provide new, more efficient equipment for consolidating waste removal, because proper treatment of waste streams is a critical component of establishing a green campus. Education institutions also can create limited or controlled service access via gates, retractable bollards, signage and permitting procedures.

An "island" on campus

The landscape should be a common thread that weaves throughout a campus, creating a pleasant and unified pedestrian experience. However, the reality is, as campuses expand and evolve, some areas become "islands" that lack strong links with the campus as a whole.

For example, UMass' Southwest Complex is separated from the main campus by Massachusetts Avenue. Because of this separation, students traditionally have had to walk a considerable distance before joining primary circulation routes and activity hubs of the main campus. UMass is working to solve this problem by making the entire campus more accessible, and by creating spaces that can serve as "front doors" to the Southwest Complex. When completed, this will improve the sense of connection between the area and the core academic campus.

A university's grounds should be perceived as a series of spaces that flow through the campus. Interconnected and well-designed open spaces are every bit as important as buildings in creating a strong campus image that is safe and sustainable.

Formulating a cohesive, open space plan comes with its share of financial and logistic challenges, but education institutions ultimately will find that addressing such challenges—and following through on campus landscape-improvement plans—will provide many benefits. Quality of life will improve for students and staff; recruitment and retention will improve; safety and sustainability goals can be achieved; and the institution's image will be enhanced. ■

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WEB 101

For more articles on landscape management and green design, visit the Articles by Topic section at ASUmag.com.



An owner's representative for Indianapolis Public Schools leads a meeting to help teachers plan for a move to swing space.

Taking Ownership

Hiring an owner's representative can help relieve some of the burden during a major construction project.

By Wayne Schmidt and Deb Kunce

Rapid growth or obsolete facilities can cause an education institution to pursue more construction and renovation projects than ever before. How does a school know if it would be beneficial to hire an owner's representative? And how does an institution choose a firm that truly represents its point of view?

Generally, when an education institution has so much construction or remodeling that it has to add staff to manage the projects, it should consider hiring an owner's representative. Most staff members already have jobs that require at least 40 hours a week. If hiring an owner's representative will allow the school's president, superintendent or facilities manager to focus on his or her main job, it probably is worth the investment. Or, if it would be

helpful to have a project supervision team hit the ground running without adding permanent overhead, an owner's representative can provide instant staffing and instant knowledge. When the projects are over, the owner's representative staff is gone and off the payroll.

This is not to say that existing staff won't spend any time on the construction or renovation project by using an owner's representative; they still will have ultimate responsibility.

Defining the role

In general, an owner's representative is a consulting firm that functions as an extension of the CEO or facilities superintendent. But the specific duties of an owner's representative may vary from firm to firm. Education institutions should look beyond the titles to ensure that the firms they hire match expectations. A company does not have to possess the experience that matches an institution's project exactly (what two projects are ever exactly alike?), but it is helpful if it has worked on similar projects. The firm needs to understand the school or university and have some technical knowledge of it.

On a "macro" level, an owner's representative should think about the big picture. It should be able to intuitively understand the institution's situation and make decisions based on data. It also should be thinking several months—or perhaps a year—ahead.

Schools and universities should consider how they want a representative to provide counsel at the highest level.

If gaining community acceptance and cooperation for a project is an issue, a school should choose a firm that knows community politics and can synthesize the community's attitude.

The owner's representative should be concerned about the school's position in the community. It should have the managerial ability to force it to think, and the loyalty to take an arrow for the school when the community has an issue.

At the business level, an owner's representative should understand architecture, construction management, building-systems design, technical details, contracts, law, financing, accounting, decisionmaking, organizational development, communications and the power of public relations.

When hiring an owner's representative, schools and universities should choose a team with multiple skill sets.



An owner's representative should know community politics and be concerned about the school's position in the community.

Tasks at hand

Once an education institution hires an owner's representative, it should have a serious discussion about goals and values. Because this entity will be representing the school's important transactions, it needs a strong sense of the institution's mindset about such things as energy efficiency, facility longevity, maintenance, appearance, master planning, facility standards and choosing materials for performance, as well as price.

Ultimately, the most valuable service the owner's representative will provide is setting a realistic budget and timeframe, and keeping the projects true to those decisions. In construction projects, the biggest contributor to budget increases can be a school's rising expectations. The "you may as well do it" justification quickly can throw a project's budget out of whack. The owner's representative has to be in a position



Indianapolis Public Schools has so many projects in its capital-improvements program, it is impossible for its internal facilities staff to supervise them all.

On a "macro" level, an owner's representative should think about the big picture.

to say "no" to the school's staff and decisionmakers.

This brings up an important point. Schools and universities should consider how they want a representative to provide counsel at the highest level. Education institutions want the firm to listen and respect their points of view. If the representative thinks the school's recommendation is not the right thing to do, the school wants to be notified directly—and privately. Have the firm lay out the options and tell the school the ramifications in terms of cost, time and relationships. Whatever the eventual decision, the owner's representative must be willing to honor it, support it and carry it out enthusiastically.

The owner's representative will facilitate the selection of professional teams, and help define the construction delivery approach, architect and owner's responsibilities. It should create a framework for decision-making that will enhance working relationships and avoid the snags and finger-pointing that can occur when lines of responsibility are not drawn clearly. These role and decisionmaking definitions should be backed up with clear and enforceable contracts.

In the next phase, the owner's representative team will prove its value as it handles the time-consuming details of pre-construction testing, land purchase, abatement, permits, coordination with city or municipal agencies, move management and other tasks.

It is tempting to think that once the decision to build or renovate has been reached, that the decision-making is done. It really is just beginning; someone must consider everything from brick and tile colors to door handles, casework finishes, and wireless vs. hard-wired technology. Using a school's initial values as a guide, the owner's representative will assume the day-to-day responsibility for hundreds of decisions, seeking guidance only for key decisions.

If an education institution operates multiple buildings or campuses, the owner's representative can help it create standards, if not already established. The standards may cover everything from criteria for selecting heating and cooling systems to room sizes, to carpet quality and paint colors. For example, if multiple buildings are involved, a school or university should not use 450 different paint colors. Taking a systemic approach to facility standards can be a great time and money saver.

Throughout the design and construction process, the owner's representative inevitably will resolve many issues having to do with different viewpoints among the various contractors or the need to coordinate the timing of their work. The proverbial "buck" for these responsibilities will be stopping at their desks, not at the school administrator's.

When the facility is up and running, the owner's representative still will have tasks to complete on a school's behalf. It will be finishing the paperwork: documenting warranties, archiving drawings and closing out contracts. Meanwhile, the only thing left on the school's "to do" list will be accepting congratulations at the grand opening. ■

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ACI/Frangkiser Hutchens, Architects & Planners

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Kansas City, MO 64131
816-761-8900

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Athletic equipment: AALCO. *Bleachers/Grandstands*: Interkal. *Brick/Masonry*: Premier Block. *Carpet*: Patcraft. *Ceilings*: Armstrong, Tectum. *Chalkboards*: Claridge. *Classroom furniture*: School Specialty. *Clocks/Time management*: American Time. *Communications systems*: Dukane. *Door hardware*: Falcon, Hager, LCN, NGP. *Doors*: Lambton, Mesker. *Draperies/Blinds*: Bali. *Drinking fountains*: Elkay. *Elevators*: Schindler. *Emergency lighting*: Dual Lite. *Fire/life-safety systems*: Notifier. *Flooring*: Ambienti, Tarkett. *HVAC units*: Assoc. Air Products. *Indoor lighting*: Delray, Elliptipar, KIM, Williams. *Kitchen equipment*: Blodgett, Hobart, Traulsen, Vulcan. *Library/media center furniture*: HON, Source Seating. *Lockers*: List. *Locks*: Falcon. *Lounge furniture*: Global. *Markerboards*: Claridge. *Office furniture*: Global. *Paint*: Sherwin-Williams. *Physical-education flooring*: Action. *Playground equipment*: Little Tykes. *Plumbing*: Bradley, Crane, Elkay. *Roofing*: Elastizell, Johns Manville. *Scoreboards/Clocks*: Neuco. *Signage*: ASI-Modulex. *Skylights*: Major Industries. *Washroom accessories*: ASI, Bobrick. *Washroom fixtures*: Bradley, Crane. *Washroom/shower partitions*: Comtec, Santana. *Windows*: MANKO.

ACI/Frangkiser Hutchens, Architects & Planners

11229 Nall, Suite 140
Leawood, KS 66211
913-338-2300

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Adams Group Architects, PA

10020 Park Cedar Drive
Charlotte, NC 28210
704-341-0303

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ADW Architects, pa

1401 W. Morehead St., Suite 100
Charlotte, NC 28208
704-379-1919

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ai DESIGN GROUP, Inc.

500 S. College St., Suite 200
Charlotte, NC 28202
704-731-8080

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West Chester, PA 19382
610-692-9112

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Architecture, Inc.

9681 Gladiolus Drive, Suite 205
Ft. Myers, FL 33908
239-476-8888

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Architectural Resource Team, Inc.

99 E. Virginia Ave., Suite 120
Phoenix, AZ 85004-1195
602-307-5399

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Ashley McGraw Architects, PC

500 S. Salina St.
Syracuse, NY 13202
315-425-1814

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ATS&R Planners/Architects/Engineers

8501 Golden Valley Road, Suite 300
Minneapolis, MN 55427
800-545-3731

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BarberMcMurry architects

623 Lindsay Place
Knoxville, TN 37919
865-934-1915

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BBH Design, PA

P.O. Box 12697
Research Triangle Park, NC 27709
919-460-6700

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Beacon Architectural Associates

145 South St.
Boston, MA 02111
617-357-7171

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Beringer Ciaccio Dennell Mabrey (BCDM, Inc.)

1015 N. 98th St., Suite 300
Omaha, NE 68114
402-384-6405

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BJAC, pa

811 W. Hargett St.
Raleigh, NC 27603
919-645-3239

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BLDD Architects, Inc.

100 Merchant St.
Decatur, IL 62523
217-429-5105

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BLRB Architects, ps

1145 Broadway Plaza, Suite 1200
Tacoma, WA 98403
253-627-5599

Bow Lake Elementary School .... p. 44
No supplier information available.

BSA Architects – Bull Stockwell Allen

501 Folsom St., Fourth Floor
San Francisco, CA 94105
415-281-4720

Santa Rosa Junior College, Bailey Parking Facility and Clock Tower... p. 145
Brick/Masonry: HC Muddox. *Elevators*: Otis. *Indoor lighting*: Insight Lighting, Kim Lighting, Spalding Lighting.

Buck Simpers Architect + Associates, Inc. (BSA+A)

715 N. Orange St.
Wilmington, DE 19801
302-658-9300

Appoquinimink High School ....p. 101
Athletic equipment: Beacon, Brine, BSNSports, Longstreth, Ridell, Suplay. *Auditorium/assembly furniture*: Wenger. *Cabinets*: Wilsonart. *Cafeteria furniture*: KI. *Carpet*: Bentley. *Ceramic tile*: Dal-Tile. *Classroom furniture*: HON, Symphony, Virco. *Computer furniture*: Berco, Virco. *Flooring*: Azrock, Eclipse, Stonhard, Wausau. *Laundry equipment*: G.E. *Library/media center furniture*: Worden. *Multipurpose areas furniture*: KI, Virco. *Office furniture*: HON, Sit On It. *Paint*: Sherwin-Williams. *Science furniture*: Shain, Virco. *Scoreboards/*

Clocks: Beacon. *Washroom/shower partitions*: Comtec.

Buehrer Group Architecture & Engineering, Inc.

314 Conant St.
Maumee, OH 43537
419-893-9021

Van Wert 6-12 School and Scott M. Niswonger Performing Arts Center of Northwest Ohio .... p. 230-231
Athletic equipment: Performance Sports Systems. *Auditorium/assembly furniture*: Irwin Seating. *Bleachers/Grandstands*: Hussey Seating. *Brick/Masonry*: Belden Brick, Evans Limestone. *Cabinets*: Stevens Industries. *Cafeteria furniture*: KI, Sico. *Card systems*: Locknetics. *Carpet*: Collins & Aikman. *Ceilings*: Armstrong. *Ceramic tile*: American Olean. *Classroom furniture*: Heidt, KI. *Clocks/Time management*: Bogen. *Communications systems*: Cisco. *Computer furniture*: Heidt, KI. *Door hardware*: Sargent. *Doors*: Cross Aluminum Products. *Draperies/Blinds*: Draper. *Drinking fountains*: Oasis. *Elevators*: Otis. *Emergency lighting*: Lithonia Lighting. *Fire/life-safety systems*: Securitron. *Flooring*: Armstrong, Wausau Tile. *Hand-drying equipment*: American Dryer. *HVAC control devices*: Invensys. *HVAC units*: McQuay. *IAQ devices*: Invensys. *Indoor lighting*: Lithonia Lighting. *Insulation*: Firestone, Hunter, Johns Manville, Owens Corning. *Kitchen equipment*: Hobart, Metro, Servolift, Traulsen. *Library/media center furniture*: Brodart, Sauder. *Lockers*: Republic Storage Systems. *Locks*: Adams-Rite, Sargent. *Markerboards*: Polyvision. *Movable partitions/walls*: Hufcor. *Office furniture*: HON. *Paint*: Sherwin-Williams. *Physical-education flooring*: Moose Sports Surfaces. *Plumbing*: Anvil, Charlotte Pipe. *Roofing*: McElroy Metal. *Science furniture*: Campbell Rhea. *Scoreboards/Clocks*: Fair-Play Scoreboards. *Security systems*: Honeywell. *Signage*: Columbus Graphics. *Washroom accessories*: Gamco, Jacknob. *Washroom fixtures*: Kohler, Zurn. *Washroom/shower partitions*: Santana. *Windows*: Manko.

Cannon Design

1100 Wilson Blvd., Suite 2900
Arlington, VA 22209
703-907-2300

Nova Southeastern University, University Center .... p. 146
Athletic equipment: American Athletics, Polar Tri-Fit, Star Trac. *Bleachers/Grandstands*: Clarin, Irwin Seating. *Flooring*: Dex-o-Tex. *Laundry equipment*: Unimac. *Lockers*: Penco Lockers. *Physical-education flooring*: Connor Sports Surfaces, Johnsonite. *Scoreboards/Clocks*: Daktronics.

Cannon Design

1901 Avenue of the Stars
Los Angeles, CA 90067
310-229-2700

***California State University—Dominquez Hills, Loker Student Union .... p. 138**
Auditorium/assembly furniture: G.E. *Cabinets*: Nevamar, Pionite. *Cafeteria furniture*: Accademia, Allermuir, Gordon, Janus et Cie, Johanson, Steelmobile. *Carpet*: Collins & Aikman. *Ceilings*: Armstrong, Ceilings Plus, Tectum. *Classroom furniture*: G.E. *Office furniture*: Palmer Snyder. *Communications systems*: Chatsworth. *Computer furniture*: Swedese. *Draperies/Blinds*: MechoShade. *Drinking fountains*: Haws. *Elevators*: Otis. *Flooring*: Azrock, Dal-Tile, Johnsonite, L.M. Scofield. *HVAC control devices*: Johnson Controls. *Library/media center furniture*: Swedese. *Lounge furniture*: Brayton, Cassina, Fritz Hansen, Kartell, Swedese. *Movable partitions/walls*: Delta Alpha, Modernfold. *Multipurpose areas furniture*: EMU, Kartell, Magis. *Office furniture*: Metro, Steelcase. *Other*: Knoll, Maharem, 3Form. *Paint*: Frazee. *Plumbing*: American Standard. *Security systems*: Edwards Systems Technology. *Washroom accessories*: Bobrick. *Washroom fixtures*: American Standard. *Washroom/shower partitions*: Santana.

Cannon Design

100 Cambridge St., Suite 1400
Boston, MA 02114
617-742-5440

University of Maine, Student Recreation and Fitness Center .... p. 139
ADA/compliance equipment: Spectrum Aquatics. *Athletic equipment*: Cybex, Draper, Life Fitness, Paragon Aquatics, Porter Athletic Equipment. *Ceramic tile*: Dal-Tile. *Indoor lighting*: Lithonia Lighting, Peerless Lighting, Winona Lighting. *Lockers*: Lyon Workspace Products. *Other*: Sports Unlimited. *Physical-education flooring*: Aacer Flooring, Connor Sports Flooring, Mondo. *Scoreboards/Clocks*: Nevco Scoreboard. *Washroom/shower partitions*: Santana.

Cannon Moss Brygger & Associates

401 Douglas St., Suite 500
Sioux City, IA 51101
712-274-2933

***Northwestern University, Rowenhorst Student Center .... p. 270**
Cabinets: Corian, Formica, Nevamar. *Cafeteria furniture*: Furniture Lab, Segis Blitz. *Carpet*: Lees, Shaw. *Chalkboards*: Polyvision. *Classroom furniture*: Royal Desks. *Indoor lighting*: Tech Lighting. *Lounge furniture*: Gamma Lounge Furniture, Haworth. *Markerboards*: Polyvision. *Multipurpose areas furniture*: X99. *Office furniture*: Haworth, Improv, Tempo, Zody. *Paint*: Diamond Vogel. *Signage*: ASI.

Carrier Johnson + CULTURE

1301 Third Ave.
San Diego, CA 92101
619-239-2353

***Pitzer College, Residential Life . p. 140**
Bleachers/Grandstands: Wausau. *Cabinets*: Avonite, Pionite. *Cafeteria furniture*: Martin Brattrud. *Card systems*: Blackboard. *Carpet*: Bentley, Shaw. *Ceilings*: USG. *Ceramic tile*: Crossville. *Classroom furniture*: Vecta. *Door hardware*: Corbin Russwin, Schlage, Von Duprin. *Doors*: Timely. *Draperies/Blinds*: Madico, Skyco. *Elevators*: Kone. *Flooring*: Tarkett. *HVAC units*: Johnson Controls. *Indoor lighting*: Focal Point, Lumux, Metalux. *Insulation*: Owens Corning. *Kitchen equipment*: Asko, G.E. *Laundry equipment*: Maytag. *Lounge furniture*: Arcadia, Jacobsen. *Markerboards*: Polyvision. *Movable partitions/walls*: Modernfold. *Multipurpose areas furniture*: Bretford. *Office furniture*: Steelcase, Think Chair. *Paint*: ICI Paints. *Plumbing*: Chroma. *Residence hall furniture*: Thurston. *Roofing*: Sarnafil. *Washroom accessories*: Bobrick. *Washroom fixtures*: Chroma. *Washroom/shower partitions*: Accurate Partitions. *Windows*: Milgard.

CDH Partners, Inc.

675 Tower Road
Marietta, GA 30060
770-423-0016

Chase Street Elementary School... p. 42
Cabinets: Hycom. *Ceilings*: Armstrong. *Clocks/Time management*: Valcom. *Doors*: DH Dace. *Flooring*: Armstrong. *HVAC control devices*: Staefa. *HVAC units*: Trane. *Paint*: Sherwin-Williams.

Roofing: Certainteed. *Signage*: Mohawk. *Washroom accessories*: Bobrick. *Windows*: Traco.

Princeton Elementary School .... p. 43
Athletic equipment: AALCO. *Brick/Masonry*: Palmetto. *Cabinets*: Commercial Casework. *Carpet*: Patcraft. *Ceilings*: Armstrong. *Door hardware*: Schlage. *Doors*: Algoma Hardwoods. *Draperies/Blinds*: Bali. *Drinking fountains*: Oasis. *Elevators*: ThyssenKrupp. *Fire/life-safety systems*: Rollins. *Flooring*: Azrock, DeGussa. *HVAC control devices*: Staefa. *Indoor lighting*: Lithonia. *Insulation*: Dow. *Library/media center furniture*: Brodart. *Locks*: Best, Schlage. *Markerboards*: Claridge. *Paint*: Porter. *Physical-education flooring*: Mondo. *Playground equipment*: Playsystems, Inc. *Roofing*: Johns Manville. *Washroom accessories*: Bobrick. *Washroom fixtures*: American Standard. *Windows*: Kawneer.

Chapman Griffin Lanier Sussenbach Architects, Inc. (CGLS)

2500 Cumberland Parkway, Suite 350
Atlanta, GA 30339
404-733-5493

Hillgrove High School .... p. 102
No supplier information available.

Christner Inc.

7711 Bonhomme Ave., Suite 100
St. Louis, MO 63105
314-725-2927

Barnes-Jewish College, Goldfarb School of Nursing .... p. 148-149
Auditorium/assembly furniture: Hussey Seating. *Brick/Masonry*: Biesanz Stone Co. *Cafeteria furniture*: KI, Kimball. *Carpet*: Lees, Monterey. *Ceilings*: Armstrong, Decoustics. *Ceramic tile*: Interceramic. *Classroom furniture*: KI, Thonet. *Clocks/Time management*: Primex. *Computer furniture*: KI, Thonet. *Doors*: Graham. *Draperies/Blinds*: MechoShade. *Elevators*: Otis. *Emergency lighting*: Cooper Lighting. *Flooring*: Johnsonite, Portobello. *HVAC control devices*: Johnson Controls. *Lounge furniture*: KI. *Markerboards*: Claridge. *Multipurpose areas furniture*: KI, Krug, Sit On It, Thonet. *Office furniture*: Humanscale, Kimball. *Paint*: Benjamin Moore. *Roofing*: Johns Manville. *Science furniture*: KI, Thonet. *Skylights*: EFCO. *Washroom accessories*: Bobrick. *Washroom/shower partitions*: Knickerbocker Partitions. *Windows*: EFCO.

Churchill Center and School .... p. 45
Brick/Masonry: Belden Brick, Soundblox. *Carpet*: Interface, Mannington. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Door hardware*: Hager, Yale. *Doors*: Algoma. *Elevators*: Schindler. *Flooring*: Johnsonite. *HVAC control devices*: Allerton. *HVAC units*: McQuay. *IAQ devices*: Nailor. *Lockers*: Penco. *Paint*: Sherwin-Williams. *Physical-education flooring*: Sport Court. *Plumbing*: American Standard. *Roofing*: Heritage, Versiguard. *Scoreboards/Clocks*: Nevco. *Skylights*: Naturalite. *Washroom accessories*: Bobrick. *Washroom/shower partitions*: Comtec. *Windows*: Tubelite.

The Clark Enersen Partners

1010 Lincoln Mall, Suite 200
Lincoln, NE 68508
402-477-9291

Doane College, Chab Weyers Education and Hixson Lied Art Building . p. 150-151
Auditorium/assembly furniture: KI. *Brick/Masonry*: Degussa Admixture, Sika. *Carpet*: Interface. *Ceilings*: Armstrong, Chicago Metallic. *Ceramic tile*: American Olean, Zebrano. *Classroom, Computer furniture*: KI. *Door hardware*: LCN Closers, McKinney, Sargent. *Doors*: VT Industries. *Draperies/Blinds*: Draper. *Drinking fountains*: Elkay. *Elevators*: O'Keefe Elevator. *Emergency lighting*: Cooper Lighting, Hubbell. *Fire/life-safety systems*: Siemens. *Flooring*: American Olean, Forbo, Johnsonite, Zebrano. *HVAC control devices*: Siemens. *HVAC units*: Greenheck, Nailor, Trane. *IAQ devices*: Trane. *Indoor lighting*: Belfer, Columbia Lighting, Cooper Lighting, Elliptipar, Kim Lighting, Lite Control, Tech Lighting, Visa Lighting. *Insulation*: Atlas Roofing. *Lounge furniture*: Brayton, Metro. *Movable partitions/walls*: Hufcor. *Multipurpose areas furniture*: Brayton, Metro. *Office furniture*: Steelcase. *Paint*: Sherwin-Williams. *Plumbing*: American Standard, Elkay, Fiat, Sloan. *Roofing*: Certainteed. *Signage*: ASI Modulex. *Washroom accessories, fixtures*: A&J Washroom Accessories. *Washroom/shower partitions*: Comtec. *Windows*: Kawneer, Manko.

Clark Nexsen Architecture & Engineering

1523 Elizabeth Ave., Suite 300
Charlotte, NC 28204
704-377-8800

The University of North Carolina at Chapel Hill, Ram Village Residence Hall Complex .... p. 147
Communications systems: Carlon, Corning, Gilbert, Hubbell, Mohawk, Superior. *Doors*: VT Industries. *Elevators*: Kone. *Emergency lighting*: Columbia Lighting, Hubbell. *Fire/life-safety systems*: Piedmont Sound & Signal. *HVAC control devices*: Siemens. *HVAC units*: Bell & Gossett, Greenheck, Trane, York. *Indoor lighting*: Devine Lighting, LSI Indoor Lighting. *Insulation*: Roxul. *Laundry equipment*: Maytag. *Locks*: Falcon, LCN Closers. *Roofing*: Carlisle Syntec. *Washroom accessories, fixtures*: American Specialties. *Windows*: Bell Architectural Windows.

Cole + Russell Architects, Inc.

537 E. Pete Rose Way, Suite 200
Cincinnati, OH 45202
513-721-8080

Evendale Elementary School......... p. 46
Athletic equipment: Porter Athletic. *Bleachers/Grandstands*: Interkal. *Brick/Masonry*: Glen-Gery. *Cabinets*: Southern Cabinetry. *Carpet*: Lees. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Door hardware*: Best, Dorma, Hager, National Guard Doors, Oshkosh Door Co. *Draperies/Blinds*: Hunter Douglas. *Flooring*: Azrock. *Insulation*: Owens Corning. *Kitchen equipment*: Bustions. *Library/media center furniture*: Library Design Association. *Locks*: Best Access Systems. *Movable partitions/walls*: Modernfold. *Paint*: Porter. *Physical-education flooring*: Robbins. *Roofing*: Certainteed. *Signage*: Columbus Graphics. *Washroom accessories*: Bradley. *Washroom/shower partitions*: Capitol Partitions, Comtec, Santana. *Windows*: Peerless.

Withrow High School, Addition and Renovation .... p. 275
Athletic equipment: Gemco. *Brick/Masonry*: Belden Brick. *Cabinets*: Artone. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Door hardware*: Best, Dorma, Hager. *Doors*: Oshkosh Door Co. *Elevators*: ThyssenKrupp. *Flooring*: Mannington. *Insulation*: Owens Corning. *Library/media center furniture*: Claridge. *Locks*: Best Access Systems. *Markerboards*: Polyvision. *Paint*: Benjamin Moore. *Physical-education flooring*: Aacer Flooring. *Roofing*: Carlisle Roofing, GAF. *Signage*: Contemporary Plastics. *Washroom/shower partitions*: Capitol Partitions. *Windows*: Traco.

The Collaborative Inc.

500 Madison Ave.
Toledo, OH 43604
419-242-7405

Lourdes College, McAlear Hall and Delp Hall .... p. 152
Carpet: Interface, Patcraft. *Ceilings*: USG. *Ceramic tile*: Crossville. *Elevators*: Otis. *Paint*: Sherwin-Williams. *Windows*: Tubelite.

Cooper Carry, Inc.

3520 Piedmont Road N.E., Suite 200
Atlanta, GA 30305
404-237-2000

Emory University, Prototype Laboratory and Research Library .... p. 276
Science furniture: Nycom.

Cope Linder Architects

30 S. 15th St.
Philadelphia, PA 19102
215-981-0200

Upper Main Line YMCA .... p. 232
Athletic equipment: Precor. *Brick/Masonry*: Diener. *Carpet*: Mannington. *Ceilings*: Armstrong. *Ceramic tile*: American Olean. *Door hardware*: Best, Von Duprin. *Drinking fountains*: Elkay. *Elevators*: Otis. *Emergency lighting*: Sure-Lites. *Flooring*: Nora Rubber Flooring. *Indoor lighting*: Juno Lighting, Metalux, Neoray. *Insulation*: Owens Corning. *Locks*: Best. *Paint*: Sherwin-Williams. *Physical-education flooring*: Mondo. *Washroom fixtures*: American Standard. *Washroom/shower partitions*: Knickerbocker. *Windows*: Kawneer.

Cordogan Clark & Associates, Inc.

960 Ridgeway Ave.
Aurora, IL 60506
630-896-4678

Aurora University, Institute for Collaboration .... p. 233
Carpet: Constantine. *Door hardware*: Schlage. *Doors*: Steelcraft. *Elevators*: Otis. *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Dal-Tile. *HVAC control devices*: AAON. *HVAC units*: A.O. Smith. *Paint*: Sherwin-Williams. *Roofing*: Tremco. *Washroom accessories*: Bobrick. *Washroom fixtures*: Kohler. *Washroom/shower partitions*: Global Partitions. *Windows*: Kawneer.

Cox Graae + Spack Architects

2909 M St. N.W.
Washington, DC 20007
202-965-7070

The Potomac School, The Potomac Upper School................................. p. 103
ADA/compliance equipment: Bobrick. *Auditorium/assembly furniture*: KI. *Cabinets*: Nevamar. *Carpet*: Collins & Aikman. *Ceilings*: USG. *Ceramic tile*: American Olean, Caesar Porcelain Tile. *Door hardware*: Locknetics, Schlage, Von Duprin. *Doors*: Marshfield. *Drinking fountains*: Haws. *Elevators*: Kone. *Emergency lighting*: Lightolier. *Flooring*: Armstrong. *HVAC units*: Carrier, Runtal, Vulcan. *Indoor lighting*: Ledalite, Lightolier, Louis Poulsen, Pinnacle. *Insulation*: Senerflex. *Library/media center furniture*: Worden. *Movable partitions/walls*: Modernfold. *Paint*: Benjamin Moore. *Plumbing*: Fiat, Just, Kohler, Moen. *Roofing*: Hydrotech, Snap Clad, Tite-Loc. *Science furniture*: Fisher Hamilton. *Skylights*: Kawneer. *Washroom accessories*: Bobrick. *Washroom fixtures*: Kohler, Moen. *Washroom/shower partitions*: Flush Metal. *Windows*: Kawneer.

CSArch Architecture/ Construction Management

40 Beaver St.
Albany, NY 12207
518-463-8068

Bethlehem High School, Renovation/ Addition... p. 104
No supplier information available.

CTA Architects Engineers

2 Main St., Suite 205
Kalispell, MT 59901
406-257-8172

Glacier High School ....p. 106-107
ADA/compliance equipment: Garaventa. *Athletic equipment*: AALCO, Draper. *Auditorium/assembly furniture*: Irwin. *Bleachers/Grandstands*: Interkal. *Brick/Masonry*: Kanta. *Cabinets*: TMI Storage. *Cafeteria furniture*: Midwest Folding Products. *Card systems*: Software House, Tyco. *Carpet*: Mannington, Shaw. *Ceilings*: Armstrong. *Ceramic tile*: American Olean. *Clocks/Time management*: Dukane. *Computer furniture*: Interior Concepts. *Computers*: Dell, MacIntosh. *Door hardware*: Sargent. *Doors*: Curries, Graham. *Elevators*: Otis. *Emergency lighting*: H.E. Williams. *Fire/life-safety systems*: Notifier. *Flooring*: Mannington. *HVAC control devices*: Alerton. *HVAC units*: McQuay. *IAQ devices*: AirTest, Ruskin. *Indoor lighting*: Day-Brite, H.E. Williams, Infinity, Omega. *Insulation*: CertainTeed. *Kitchen equipment*: Atlas. *Library/media center furniture*: Bretford, Legacy. *Locks*: Sargent. *Markerboards*: Best Rite. *Movable partitions/walls*: Hufcor. *Multipurpose areas furniture*: Comfortek Seating, Wisconsin Bench. *Office furniture*: Interior Concepts. *Other*: Draper. *Paint*: Sherwin-Williams. *Physical-education flooring*: Action Floor Systems. *Plumbing*: Amtrol, Cemline, Giant, Taco, Zurn. *Roofing*: FiberTite. *Science furniture*: Wisconsin Bench. *Scoreboards/Clocks*: Nevco. *Security systems*: Software House, Tyco. *Washroom accessories*: Bradley. *Washroom fixtures*: Willoughby. *Washroom/shower partitions*: General Partitions. *Windows*: Kawneer, Vistawall. *Wire management*: B-Line.

Cuningham Group Architecture, PA

201 Main St. S.E., Suite 325
Minneapolis, MN 55414
612-379-3400

***Watertown-Mayer Elementary School... p. 36**
Athletic equipment: Porter. *Brick/Masonry*: Minnesota Brick & Tile. *Cabinets*: Georgia-Pacific. *Cabinets*: LSI. *Carpet*: Collins & Aikman. *Ceilings*: USG. *Ceramic tile*: Royal Mosa. *Communications systems*: Mitel. *Door hardware*: ASSA Abloy, Ives, Stanley, Von Duprin. *Doors*: Marshfield. *Drinking fountains*: Elkay. *Elevators*: Minnesota Elevator. *Emergency lighting*: Lithonia Lighting. *Fire/life-safety systems*: JL Industries. *Flooring*: Forbo. *HVAC control devices*: Direct Digital Controls. *Indoor lighting*: Lithonia Lighting. *Insulation*: Owens Corning. *Library/media center furniture*: Interlam. *Locks*: Sargent. *Markerboards*: Neal Slate. *Movable partitions/walls*: Hufcor. *Other*: 3Form. *Paint*: Sherwin-Williams. *Physical-education flooring*: Robbins. *Roofing*: Firestone. *Washroom accessories*: Bradley. *Washroom/shower partitions*: Santana. *Windows*: EFCO.

Washington Technology Magnet Middle School.. p. 277
Cabinets: LSI. *Carpet*: Milliken. *Ceilings*: USG. *Ceramic tile*: Dal-Tile. *Door hardware*: Corbin Russwin, LCN. *Doors*: VT Industries. *Draperies/Blinds*: Draper. *Drinking fountains*: Elkay. *Elevators*: Schindler. *Emergency lighting*: Hydrel. *Fire/life-safety systems*: Notifier. *Flooring*: Mannington. *Hand-drying equipment*: Bradley. *Indoor lighting*: Lightolier, Lithonia. *Insulation*: Owens

Corning. *Locks*: Best, Corbin Russwin. *Markerboards*: Addendum Ten. *Paint*: ICI Dulux. *Plumbing*: American Standard, Sloan. *Roofing*: GAF. *Skylights*: Wasco. *Washroom accessories*: Bobrick. *Washroom fixtures*: Bradley, Kohler. *Washroom/shower partitions*: Comtec.

Dake-Wells Architecture

401 W. Walnut
Springfield, MO 65806
417-831-9904

Joel E. Barber Elementary School, Multipurpose Cafeteria Addition.. p. 47
Brick/Masonry: Midwest Products Group. *Door hardware*: Schlage, Von Duprin. *Flooring*: Tnemec. *HVAC units*: Cook. *Indoor lighting*: G.E. Lighting. *Kitchen equipment*: Hobart. *Paint*: Sherwin-Williams.

Davis Architects, Inc.

120 23rd St. S.
Birmingham, AL 35222
205-322-7482

***Alabama 4-H Center, Environmental Education Building .... p. 223**
Auditorium/assembly furniture: KI. *Brick/Masonry*: Block USA. *Cabinets*: Biofiber, Trespa. *Carpet*: Interface, Mannington. *Ceilings*: Armstrong. *Ceramic tile*: Crossville. *Chalkboards*: Polyvision. *Door hardware*: Ives, Schlage, Von Duprin. *Doors*: Marshfield. *Drinking fountains*: Elkay. *Elevators*: ThyssenKrupp. *Emergency lighting*: McPhilben. *Fire/life-safety systems*: Siemens. *Flooring*: Constantine, Crossville. *HVAC control devices, units, IAQ devices*: Trane. *Indoor lighting*: Day-Brite. *Insulation*: Johns Manville. *Locks*: Schlage. *Movable partitions/walls*: Modernfold. *Multipurpose areas furniture*: Berco, Sit On It. *Office furniture*: Artopex, Sit On It. *Paint*: Benjamin Moore. *Plumbing*: Crane, Elkay. *Roofing*: MBCI. *Science furniture*: Izzy Design. *Washroom accessories*: ASI, Bradley. *Washroom fixtures*: Crane, Kohler, Sloan. *Washroom/shower partitions*: Trespa. *Windows*: Nelson.

DCC Architects

3555 Pecos McLeod
Las Vegas, NV 89121
702-732-0084

College of Southern Nevada, Library/ Classroom Building .... p. 153
Ceilings: USG. *Ceramic tile*: Interceramic. *Door hardware*: McKinney, Norton, Pemko, Yale. *Doors*: Graham. *Elevators*: ThyssenKrupp. *Hand-drying equipment*: Georgia Pacific. *Indoor lighting*: Gotham, Lithonia. *Paint*: Frazee. *Roofing*: Carlisle. *Washroom accessories*: Bobrick, Georgia Pacific. *Washroom fixtures*: American Standard. *Washroom/shower partitions*: Capitol, Santana. *Windows*: PPG, U.S. Aluminum.

DCM Architecture & Engineering LLC

57 Kresson Road
Cherry Hill, NJ 08034
856-795-2224

***Augusta Kindergarten School..... p. 24**
Brick/Masonry: Clayton Block. *Flooring*: Lonseal. *Other*: Alcoa. *Playground equipment*: Kompan. *Skylights*: Solatube. *Windows*: American Windows.

Design Architects Plus, Inc.

1501 S.W. 104th St.
Oklahoma City, OK 73159
405-691-9900

Newcastle Middle School................ p. 78
No supplier information available.

Design Collaborative, Inc.

200 E. Main St., Suite 600
Ft. Wayne, IN 46802
260-422-4241

Grace College and Theological Seminary, Orthopaedic Capital Center... p. 154
Athletic equipment: Advantage Divider, American Athletic, Spalding, Sports Imports. *Bleachers/Grandstands*: Sheridan Seating, Track Corp. *Carpet*: Lees. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Classroom furniture*: Irwin. *Door hardware*: Glynn Johnson, Hager, Hewi, LCN Closers, National Guard, Rockwood, Von Duprin. *Doors*: Ives, Marshfield, Overhead Door. *Drinking fountains*: Oasis. *Elevators*: Otis. *Emergency lighting*: McPhilben. *Fire/life-safety systems*: Anvil, Argco, Erico, JL Industries, Kennedy Valve, Notifier, Potter, Victaulic, Viking. *Flooring*: Johnsonite, Mannington, Stoneshield. *HVAC control devices*: ASI Controls, Belimo, Johnson Controls, Kele. *HVAC units*: BERKO, Fuijitsu, York. *IAQ devices*: Armacell, Greenheck, Ruskin. *Indoor lighting*: Bronzelite, Day-Brite, Day-O-Lite, Liton, Omega. *Insulation*: Knauf. *Locks*: Best Lock. *Markerboards*: Claridge. *Movable partitions/walls*: Modernfold. *Other*: Da-Lite, Grenon Wallcovering, KM Fabrics. *Paint*: Porter Paint,Sherwin-Williams. *Physical-education flooring*: Connor. *Plumbing*: Armstrong, Brasscraft, Lochinvar, ProFlo, Zurn. *Roofing*: Carlisle, Fabral, Knauf, Omega, Sno-Gem, Sonneborn, Tamko. *Security systems*: Best Access. *Washroom accessories*: Bradley, Koala Kare. *Washroom fixtures*: Acorn, Centoco, Delta, Elkay, Fiat, Kohler, Woodford. *Washroom/shower partitions*: Lawler, Santana. *Windows*: Kawneer. *Wire management*: Leviton Telecom.

Design Partnership of Cambridge

500 Rutherford Ave.
Charlestown, MA 02129
617-241-9800

Reading Memorial High School .. p. 278
No supplier information available.

Sacred Heart Early Childhood Center... p. 28
No supplier information available.

DF Gibson Architects, PC

36 West 37th St.
New York, NY 10018
212-400-6210

New Jersey Institute of Technology, Eberhardt Hall (with Cody Eckert & Associates, PA) .... p. 274
No supplier information available.

South Hackensack Memorial Elementary School .... p. 48
No supplier information available.

Di Cara | Rubino Architects

30 Galesi Drive, West Wing
Wayne, NJ 07470
973-256-0202

Cherry Hill Elementary School, Additions and Alterations .... p. 49
Athletic equipment: Porter. *Brick/Masonry*: Tri-State Brick. *Cabinets*: Clearwood. *Carpet*: Collins & Aikman, Tandus. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Clocks/Time management*: Lowell. *Communications systems*: Lowell, Panasonic. *Door hardware*: Ingersoll Rand. *Doors*: Mohawk. *Draperies/Blinds*: Hunter Douglas. *Drinking fountains*:

Bobrick. *Elevators*: Canton Elevator. *Emergency lighting*: Gardco, McPhilben. *Fire/life-safety systems*: G.E. *Flooring*: Johnsonite, Mannington. *Hand-drying equipment*: Bobrick. *HVAC units*: Aaon, Sterling. *Indoor lighting*: Day-Brite, Focal Point, Ledalite, Visa Lighting. *Insulation*: Johns Manville. *Library/media center furniture*: Arnold, Interchange, Leland. *Locks*: Ingersoll Rand. *Markerboards*: Smart Technologies, Webster. *Movable partitions/walls*: Modernfold. *Other*: UniRac. *Paint*: Benjamin Moore, ScuffMaster, Sherwin-Williams. *Plumbing*: Zurn. *Roofing*: Garland. *Security systems*: Ingersoll Rand. *Washroom accessories*: Bobrick. *Washroom fixtures*: Kohler. *Washroom/shower partitions*: Santana. *Windows*: Architectural Window.

Dickinson Hussman Architects

7777 Bonhomme Ave., Suite 2100
St. Louis, MO 63105
314-727-8500

Kirkwood High School, Earl and Myrtle Walker Science Center .... p. 234
Brick/Masonry: Belden Brick. *Cabinets*: Sheldon Laboratory Systems. *Carpet*: Shaw. *Ceilings*: Armstrong. *Ceramic tile*: Crossville. *Drinking fountains*: Halsey Taylor. *Elevators*: ThyssenKrupp. *Flooring*: Armstrong. *Paint*: PPG. *Plumbing*: American Standard. *Washroom accessories*, *Washroom/shower partitions*: Bobrick.

Kirkwood High School, Physical Education Building .... p. 235
Athletic equipment: Aalco. *Bleachers/Grandstands*: Hussey Seating. *Brick/Masonry*: Belden Brick. *Ceilings*: Armstrong. *Doors*: Marshfield, Steelcraft. *Drinking fountains*: Halsey Taylor. *Indoor lighting*: Lithonia Lighting, SPI Lighting. *Paint*: PPG. *Physical-education flooring*: Robbins Sports Surfaces. *Plumbing*: American Standard. *Scoreboards/Clocks*: Daktronics. *Washroom accessories*, *Washroom/shower partitions*: Bobrick.

DLR Group

6225 N. 24th St., Suite 250
Phoenix, AZ 85016
602-381-8580

Betty Fairfax High School .... p. 105
Athletic equipment: Porter. *Auditorium/assembly furniture*: Hussey Seating. *Bleachers/Grandstands*: Porter. *Cabinets*: Wilsonart. *Cafeteria furniture*: Midwest Folding Products. *Card systems*: 3M Library Systems. *Carpet*: Shaw. *Ceilings*: Armstrong, USG. *Ceramic tile*: Dal-Tile. *Chalkboards*: Claridge. *Childcare furniture*, *classroom furniture*: TMI Design Systems. *Door hardware*: McKinney, Sargent. *Draperies/Blinds*: General Cubicle Company. *Drinking fountains*: Elkay. *Elevators*: Otis. *Emergency lighting*: Lithonia. *Flooring*: Armstrong. *Hand-drying equipment*: Excel. *HVAC control devices*: Lonmark. *Indoor lighting*: Bodine, Osram Sylvania, Valmont. *Kitchen equipment*: G.E. *Library/media center furniture*: TMI Design Systems. *Lockers*: Art Metal Products. *Lounge furniture*: TMI Design Systems. *Markerboards*: Claridge. *Movable partitions/walls*: Modernfold. *Multipurpose areas furniture*, *Office furniture*: TMI Design Systems. *Paint*: Dunn Edwards. *Physical-education flooring*: Hillyard. *Roofing*: Johns Manville. *Science furniture*: TMI Design Systems. *Scoreboards/Clocks*: Porter. *Signage*: Claridge. *Washroom accessories*: American Specialties. *Washroom fixtures*, *Washroom/shower partitions*: American Standard. *Waste receptacles*: Marathon Equipment Company. *Windows*: PPG.

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Embry-Riddle Aeronautical University, Chris & Stephen Udvar-Hazy Library and Learning Center .... p. 156
Brick: Western Block. *Brick/Masonry*: Superlite. *Cabinets*: CYRO Industries. *Cabinets*: Wilsonart. *Card systems*: Blackbox. *Carpet*: Lees. *Ceilings*: Armstrong World Industries, Tectum. *Ceramic tile*: Dal-Tile. *Door hardware*: Bommer, Hager, Ives, PBB, Pemko, Roton, Von Duprin. *Doors*: Hardwoods Inc. *Draperies/Blinds*: Hunter Douglas. *Drinking fountains*: Elkay, Josam. *Elevators*: ThyssenKrupp. *Emergency lighting*: Lithonia. *Fire/life-safety systems*: Fire-Lite Alarms. *HVAC control devices*: Johnson Controls, Metasys. *HVAC units*: Carrier. *Indoor lighting*: Lithonia, Osram Sylvania, Valmont. *Insulation*: CP Chemical Co., Nordic Builders, PolyMaster. *Markerboards*: Claridge. *Paint*: Dunn-Edwards, PPG, Sherwin-Williams. *Roofing*: Atlas Roofing. *Security systems*: Blackbox. *Signage*: Claridge, RigidLyte. *Washroom accessories*: Josam. *Washroom fixtures*: American Standard. *Washroom/shower partitions*: Marlite. *Waste receptacles*: Josam. *Windows*: Viracon.

Green River Community College, Marv Nelson Science Learning Center... p. 157
Auditorium/assembly furniture: KI. *Brick/Masonry*: Keystone. *Cabinets*: Collegedale, Corporate Casework. *Carpet*: Collins & Aikman. *Ceilings*: USG. *Classroom*, *Computer furniture*: KI. *Door hardware*: LCN, Washington Architectural Hardware. *Doors*: LCN, Washington Architectural Hardware. *Draperies/Blinds*: Superior Interiors. *Drinking fountains*: Elkay. *Elevators*: Schindler. *Emergency lighting*: LVS Controls, Sure-Lites. *Fire/life-safety systems*: Master Fire, Notifier. *Flooring*: Mondo. *HVAC control devices*: Siemens. *HVAC units*: Cleaver-Brooks, Trane. *Indoor lighting*: Alkco, Fail-Safe, Focal Point, ioLighting, Kirlin, Louis Poulsen, Metalux, NeoRay, Portfolio, Se'Lux, Shaper, Sure-Lites, Zumtobel. *Insulation*: Insulpro. *Lockers*: Engineered Products. *Locks*: Siemens. *Movable partitions/walls*: Modernfold, Won-Door. *Office furniture*: KI. *Other*: McGraw-Edison. *Plumbing*: Elkay, Kohler, Sloan. *Roofing*: AEP Span. *Science furniture*: Collegedale. *Skylights*: Kawneer. *Washroom accessories*, *fixtures*: Sound Janitorial. *Windows*: Kawneer.

DLR Group

900 Fourth Ave., Suite 700
Seattle, WA 98164
206-461-6000

Lincoln High School..................... p. 279
Athletic equipment: Manitonic. *Brick/Masonry*: Mutual Materials. *Cabinets*: Fisher Hamilton. *Carpet*: Collins & Aikman. *Ceilings*: USCD. *Ceramic tile*: Dal-Tile. *Classroom furniture*: Fisher Hamilton. *Door hardware*, *Doors*: Benson. *Draperies/Blinds*: Levelor. *Elevators*: Kone. *Emergency lighting*: Lightolier, Luminaire, Yames. *Fire/life-safety systems*: Cosco. *Flooring*: Tarkfest. *HVAC control devices*: Betchart, Petra. *HVAC units*: Petra. *Indoor lighting*: Lightolier, Luminaire, Yames. *Library/media center furniture*: Fisher Hamilton. *Lockers*: Lyon. *Locks*: Schlage. *Markerboards*: Claridge. *Movable partitions/walls*: Hufcor. *Other*: Blue Sky. *Physical-education flooring*: Horner, Mondo. *Plumbing*: Kohler. *Roofing*: Mularky. *Science furniture*: Fisher Hamilton. *Security systems*: Sonitrol. *Signage*: Messenger Corp. *Skylights*: Stephens. *Washroom accessories*: Bobrick. *Washroom fixtures*: Kohler. *Windows*: Legacy. *Wire management*: Totem.

DLR Group

222 S. Riverside Plaza, Suite 2220
Chicago, IL 60606
312-382-9980

***Brokaw Early Learning Center .... p. 26**
Brick/Masonry: Belden Brick. *Carpet*: Collins & Aikman. *Ceilings*: Celotex, Chicago Metallic. *Communications systems*: Lowell, Quam, Valcom. *Door hardware*: Algoma, Glynn Johnson, Ives, Pemko, Schlage, Steelcraft, Von Duprin. *Doors*: Algoma, Glynn Johnson, Ives, Pemko, Schlage, Steelcraft, Von Duprin. *Drinking fountains*: Elkay. *Emergency lighting*: Lithonia. *Fire/life-safety systems*: Notifier. *Flooring*: American Olean, Armstrong. *HVAC units*: Bell & Gossett, Berko, Greenheck, McQuay, Qmark, Vulcan. *Indoor lighting*: Lithonia. *Insulation*: Owens Corning. *Paint*: ICI. *Plumbing*: Fiat, Wilkins, Woodford, Zurn. *Roofing*: Firestone, Tectum. *Security systems*: Rixson. *Skylights*: Major Industries. *Washroom accessories*: Bradley. *Washroom fixtures*: American Standard, Bemis, Chicago Faucets, Elkay, McGuire. *Windows*: Kawneer.

DMJM Design | AECOM

3101 Wilson Blvd., Suite 900
Arlington, VA 22201
703-682-4900

Christopher Newport University, David Student Union .... p. 155
No supplier information available.

Dober, Lidsky, Craig and Associates, Inc.

385 Concord Ave., Suite 201
Belmont, MA 02478
617-489-1162

Middle Tennessee State University, Campus Master Plan .... p. 321
No supplier information available.

Dull Olson Weekes Architects

319 S.W. Washington St. #200
Portland, OR 97204
503-226-6950

***Rosa Parks School and Community Campus at New Columbia .... p. 16-17**
No supplier information available.

EI Associates

2001 N. Front St., Building #3
Harrisburg, PA 17102
717-233-4556

Shallow Brook Intermediate School.. p. 79
ADA/compliance equipment: National Wheel-O-Vator. *Bleachers/Grandstands*: Hussey Seating. *Cabinets*: LSI. *Carpet*: Lees. *Ceramic tile*: Dal-Tile. *Communications systems*: SimplexGrinnell. *Door hardware*: LCN Closers, Schlage, Von Duprin. *Doors*: VT Industries. *Draperies/Blinds*: Lutron. *Elevators*: ThyssenKrupp. *Emergency lighting*: Cooper Lighting. *Fire/life-safety systems*: Siemens, Viking. *HVAC control devices*: Siemens. *HVAC units*: Trane. *Indoor lighting*: Cooper Lighting. *Insulation*: Owens Corning. *Kitchen equipment*: Hobart. *Library/media center furniture*: Worden. *Lockers*: Penco. *Markerboards*: Claridge. *Movable partitions/walls*: Modernfold. *Multipurpose areas furniture*: Pittsburgh Stage. *Other*: Grace, Imetco, WR Meadow. *Paint*: ICI Paints. *Physical-education flooring*: Dynamic Sports. *Roofing*: Carlisle Syntec, Elk. *Signage*: Bayuk Graphics Systems. *Skylights*: Wasco. *Windows*: Kawneer.

Emc2 Group Architects Planners, PC

1635 N. Greenfield Road, Suite 144
Mesa, AZ 85205
480-830-3838

Villago Middle School.................... p. 80
Athletic equipment: Arizona Courtlines. *Bleachers/Grandstands*: Hussey Seating. *Brick/Masonry*: Western Block. *Carpet*: Shaw. *Ceilings*: Armstrong, Owens Corning. *Ceramic tile*: American Olean. *Door hardware*: Hager, Ives, LCN, Securitron, Von Duprin. *Doors*: Amweld, Cornell, Oshkosh. *Drinking fountains*: Elkay. *Fire/life-safety systems*: Larsen's, SimplexGrinnell, Tyco. *Flooring*: Armstrong, Connor, 3M. *HVAC control devices*: Armstrong, Winters. *HVAC units*: Brasch, Capitvaire, International Environmental, Mitsubishi, York. *Indoor lighting*: Lithonia. *Insulation*: Johns Manville. *Kitchen equipment*: Berner, Blodgett, Carrier, Coldzone, Delfield, Eagle, Insinger, Merco, Salvajor, Traulsen, Ventmatic. *Lockers*: Penco. *Locks*: Best. *Markerboards*: Claridge. *Other*: Bolander, Dalite, USG, Wenger. *Physical-education flooring*: Taraflex. *Plumbing*: A.O. Smith, Brass Craft, Crane, Dearborn Brass, Sloan, Truebro, Wilkins, Zurn. *Roofing*: GAF, Tamko. *Security systems*: SimplexGrinnell. *Signage*: Signsource. *Windows*: PPG.

Esherick Homsey Dodge & Davis (EHDD)

500 Treat Ave., Suite 201
San Francisco, CA 94110
415-285-9193

University of California—Irvine, Biological Sciences 3 ....p. 158-159
Cabinets: Kewaunee Scientific. *Carpet*: Invision, J&J Commercial. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Door hardware*: LCN, Schlage. *Elevators*: Mitsubishi. *Emergency lighting*: Gardco, G.E., Omega. *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Stoneshield. *HVAC control devices, units*: Huntair. *Indoor lighting*: Day-Brite, Evenlite, Kenall, Omega. *Insulation*: Johns Manville. *Physical-education flooring*: Armstrong. *Plumbing*: Watts. *Washroom/shower partitions*: Bobrick. *Windows*: Arcadia.

ESPA Corp.

7120 Grand Blvd., Suite 100
Houston, TX 77054
713-680-0080

Phillis Wheatley High School..... p. 108
ADA/compliance equipment: Florestone, Garaventa, Inclinator VL, Lava Shield. *Athletic equipment, Auditorium/assembly furniture*: Hussey. *Bleachers/Grandstands*: Sturdisteel. *Brick/Masonry*: Acme, Arriscraft. *Cabinets*: Martinez. *Cafeteria furniture*: School Specialties. *Card systems*: Schlage. *Carpet*: Collins & Aikman. *Ceilings, Ceramic tile*: Armstrong. *Chalkboards*: Claridge. *Classroom furniture*: American Seating. *Clocks/Time management, Communications systems*: Bogen. *Computer furniture*: Virco. *Computers*: Intel. *Door hardware*: Best. *Doors*: Falcon, Vistawall. *Draperies/Blinds*: Levelor. *Drinking fountains*: Elkay. *Elevators*: Schindler. *Emergency lighting*: Caterpillar, Olympian. *Fire/life-safety systems*: Gemini. *Flooring*: American Marble, Roppe. *Hand-drying equipment*: ASI. *HVAC control devices, units*: Trane. *Indoor lighting*: Novitas. *Insulation*: CertainTeed. *Kitchen equipment*: Bally, Fry Master, Hobart, Traulsen, Vulcan. *Library/media center furniture*: Martinez. *Lockers*: Penco Products. *Locks*: Falcon. *Lounge furniture*: Virco. *Markerboards*: Claridge, Steelcase. *Movable partitions/walls*: Hufcor. *Multipurpose areas furniture*: American Seating. *Office furniture*: HON. *Paint*: ICI. *Physical-education flooring*: Sport Court. *Plumbing*: Kohler. *Roofing*: GAF. *Science furniture*: Frey Scientific. *Scoreboards/Clocks*: Daktronics. *Security systems*: Ansul. *Signage*: Daktronics. *Skylights*: Naturalite, Supersky. *Washroom accessories*: Bobrick.

Washroom fixtures: Elkay. *Washroom/shower partitions*: Global Partitions. *Windows*: Admiral Glass. *Wire management*: Belden Brick.

Facilities Cost Management Group LLC

(with Rambo Associates, Inc.)
406 S. 12th St., Suite 300
Omaha, NE 68102
402-346-3130

North Cedar Community Schools, Mechanicsville Elementary .... p. 50
No supplier information available.

FFKR Architects

730 Pacific Ave.
Salt Lake City, UT 84104
801-521-6186

Brigham Young University, Gordon B. Hinckley Alumni and Visitors Center... p. 236
No supplier information available.

Salt Lake Community College, Larry H. Miller Campus .... p. 160
No supplier information available.

Finegold Alexander + Associates Inc.

77 N. Washington St.
Boston, MA 02114
617-227-9272

Mount Ida College, New Residence Hall..p. 161
Brick/Masonry: Carolina Ceramics. *Cabinets*: Meriuat. *Carpet*: Monterey. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Door hardware*: Schlage. *Draperies/Blinds*: Cascade Coil Drapery. *Flooring*: Armstrong. *Insulation*: Johns Mansville, Owens Corning. *Kitchen equipment*: G.E. *Laundry equipment*: Maytag. *Locks*: Schlage. *Lounge furniture*: Brattrud, Brayton, Harter, Stylex. *Paint*: Benjamin Moore. *Roofing*: Firestone. *Signage*: Advanced Signing. *Washroom accessories*: Bobrick, Umbra. *Washroom fixtures*: Crane. *Windows*: Traco.

Flansburgh Architects

77 N. Washington St.
Boston, MA 02114
617-367-3970

Lawrence High School .... p. 109
ADA/compliance equipment: Garaventa. *Athletic equipment*: Kwik Goal. *Auditorium/assembly furniture*: American Seating. *Bleachers/Grandstands*: Sheridan. *Brick/Masonry*: Karnak, Sonoflex, Teks. *Carpet*: Power Bond. *Ceilings*: Armstrong. *Chalkboards*: Polyvision. *Communications systems*: Signet Electronic Systems. *Door hardware*: LCN Closers. *Doors*: EH Friedrich, VT Industries. *Draperies/Blinds*: Draper, Wenger. *Drinking fountains*: Halsey Taylor. *Elevators*: Delta Beckwith. *Emergency lighting*: Caterpillar. *Fire/life-safety systems*: Larsen. *Flooring*: Duraflex, Horner, Mannington. *HVAC units*: Andover, Veeder Root, York. *Kitchen equipment*: Atlas, Avtec, Taku. *Lockers*: Republic Storage Systems. *Markerboards*: Polyvision. *Paint*: Pittsburgh Paints. *Physical-education flooring*: Dynamic. *Plumbing*: Johns Manville. *Roofing*: Owens Corning. *Skylights*: Kalwall. *Windows*: Acroflur. *Washroom accessories*: American Specialties. *Washroom fixtures*: Acorn, Sloan. *Washroom/shower partitions*: Symmons. *Windows*: Oldcastle Glass. *Wire management*: Lee Products, Southwire.

Foreman Architects Engineers Inc.

525 W. Newcastle St.
Zelienople, PA 16063
724-452-9690

Charles A. Huston Middle School, Additions and Renovations............ p. 81
Auditorium/assembly furniture, Bleachers/Grandstands: Irwin Seating. *Brick/Masonry*: Taylor Clay. *Ceilings*: Conwed. *Doors*: Clopay, Steelcraft, VT Industries. *Insulation*: Guardian, Owens Corning. *Other*: Blanton & Moore, Case Systems. *Roofing*: Genflex. *Washroom/shower partitions*: Scranton Products. *Windows*: Traco.

French Associates, Inc.

(with Perkins+Will)
1600 Parkdale Road
Rochester, MI 48307
248-656-1377

Parker High School .... p. 110
Auditorium/assembly furniture: Wenger. *Brick/Masonry*: Belden Brick. *Carpet*: Interface. *Ceilings*: Rulon. *Ceramic tile*: Dal-Tile. *Door hardware*: Ingersoll Rand. *Flooring*: Star School Flooring. *Indoor lighting*: Superior. *Waste receptacles*: World Wide Waste. *Windows*: Omega Glass.

Fuller and D'Angelo PC Architects and Planners

45 Knollwood Road
Elmsford, NY 10523
914-592-4444

Stamford Public Schools, Academy of Information Technology and Engineering .... p. 237
Bleachers/Grandstands: Hussey Seating. *Brick/Masonry*: A. Jandris & Sons. *Cabinets*: TMI. *Cafeteria furniture*: Imax Chairs, KI. *Carpet*: Mohawk. *Ceilings*: Armstrong, USG. *Ceramic tile*: U.S. Ceramic Tile, Vitra. *Chalkboards*: Polyvision. *Classroom furniture*: Smith Systems, Virco. *Computers*: Dell, MacIntosh. *Doors*: Algoma. *Draperies/Blinds*: MechoShade. *Elevators*: Thyssen. *Flooring*: Azrock. *HVAC control devices*: Johnson Controls. *HVAC units*: Annex Air. *Indoor lighting*: Metalux. *Library/media center furniture*: Totalibra. *Lockers*: Penco. *Lounge furniture*: Artopex. *Markerboards*: Polyvision. *Movable partitions/walls*: Modernfold. *Office furniture*: Artopex. *Paint*: Sherwin-Williams. *Physical-education flooring*: Action Floor Systems. *Roofing*: Johns Manville. *Science furniture*: Haworth. *Signage*: Intelligent Design. *Washroom accessories*: Bobrick. *Washroom fixtures*: Kohler. *Windows*: Kawneer.

The FWA Group Architects

500 East Blvd.
Charlotte, NC 28203
704-332-7004

University of South Carolina, Arnold School of Public Health ....p. 162
Brick/Masonry: Boren Brick. *Carpet*: Shaw. *Ceilings*: Armstrong. *Door hardware*: LCN, Rockwood, Stanley. *Doors*: VT Industries. *Elevators*: Schindler. *Flooring*: Armstrong. *Insulation*: Owens Corning. *Movable partitions/walls*: Won-Door. *Paint*: Sherwin-Williams. *Plumbing*: Chicago Faucets, Duravit. *Roofing*: Johns Manville. *Washroom accessories*: Bobrick. *Windows*: Kawneer.

Gignac & Associates, LLP

416 Starr St.
Corpus Christi, TX 78401
361-884-2661

Faye Webb Elementary School ...... p. 51
ADA/compliance equipment: American Specialties. *Brick/Masonry*: Southwest Concrete. *Carpet*: Interface. *Ceilings*: Celotex. *Ceramic tile*: Dal-Tile. *Chalkboards*: Polyvision. *Door hardware*: Schlage. *Doors*: VT Industries. *Draperies/Blinds*: Graber. *Drinking fountains*: Elkay. *Emergency lighting*: Lithonia. *Fire/life-safety systems*: Silent Knight. *HVAC units*: Trane. *Indoor lighting*: Lithonia. *Insulation*: Knauf. *Markerboards*: Polyvision. *Paint*: Devoe. *Playground equipment*: Miracle Recreation Eqpt. *Roofing*: Tremco. *Scoreboards/Clocks*: National Time. *Skylights*: American Skylights. *Washroom accessories*: American Specialties. *Washroom fixtures*: American Standard. *Washroom/shower partitions*: American Specialties. *Windows*: Kawneer.

Gilbert Architects Inc.

626 N. Charlotte St.
Lancaster, PA 17603
717-291-1077

Alfred G. Waters Middle School .... p. 82
Auditorium/assembly furniture, Bleachers/Grandstands: Hussey Seating. *Cabinets*: LSI. *Cafeteria furniture*: KI. *Carpet*: Shaw. *Ceilings*: Armstrong. *Ceramic tile*: American Olean. *Classroom furniture*: HON, Virco. *Computer furniture*: Virco. *Doors*: VT Industries. *Draperies/Blinds*: Bali. *Flooring*: Armstrong. *Library/media center furniture*: Montel, Worden. *Lockers*: Penco. *Lounge furniture*: KI. *Markerboards*: Claridge. *Multipurpose areas furniture*: Virco. *Office furniture*: HON. *Paint*: Sherwin-Williams. *Physical-education flooring*: Robbins. *Science furniture*: Virco.

Matapeake Middle School and Ninth Grade Academy .... p. 238
Bleachers/Grandstands: Interkal. *Cabinets*: LSI. *Carpet*: Interface. *Ceilings*: Armstrong. *Ceramic tile*: Crossville. *Clocks/Time management, Communications systems*: Rauland Borg. *Draperies/Blinds*: Draper. *Emergency lighting*: Lithonia Lighting. *Fire/life-safety systems*: 3M Fire Protection. *Flooring*: Nora. *HVAC control devices*: Johnson Controls. *HVAC units*: Trane. *IAQ devices*: Greenheck. *Indoor lighting*: Lithonia Lighting. *Kitchen equipment*: Cleveland, Coldzone, Garland, Hobart, Victory. *Library/media center furniture*: Palmeri. *Lockers*: Penco. *Markerboards*: Polyvision. *Movable partitions/walls*: Modernfold. *Paint*: Sherwin-Williams. *Physical-education flooring*: Robbins. *Security systems*: SimplexGrinnell.

GMB Architects-Engineers

85 E. Eighth St., Suite 200
Holland, MI 49423
616-796-0200

Zeeland Public Schools, Zeeland Natatorium.................... p. 239
Athletic equipment: AALCO, Schelde North America. *Bleachers/Grandstands*: E&D Specialty Stands. *Brick/Masonry*: Belden Brick. *Carpet*: Collins & Aikman. *Ceilings*: USG. *Ceramic tile*: Dal-Tile, Graniti Fiandre. *Clocks/Time management*: Dukane. *Door hardware*: Architectural Hardware Co. *Doors*: Cross Aluminum Products, Oshkosh Door Co. *Draperies/Blinds*: All-Lite Arch Products, Creative Windows. *Drinking fountains*: Elkay. *Elevators*: Schindler. *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Harlequin, Johnsonite, Mannington. *HVAC control devices*: Honeywell. *HVAC units*: Dectron, Florida Heat Pump. *IAQ devices*: Farr. *Indoor lighting*: Lithonia. *Lockers*: Republic Storage Systems. *Markerboards*: Polyvision. *Other*: Bendervac, Duraflex Aluminum Springboards, Neptune Benson. *Paint*: Sherwin-Williams. *Physical-education flooring*: Connor Sports Floors. *Roofing*: Carlisle Roofing, GenFlex Roofing. *Scoreboards/Clocks*: Colorado Time Systems. *Washroom accessories*: SA Morman. *Washroom fixtures*: Delta, Kohler, Sloan. *Washroom/shower partitions*: Capitol Partitions. *Windows*: Oldcastle, Safti First, Viracon.

Gould Evans Associates

4041 Mill St.
Kansas City, MO 64111
816-931-6655

Metropolitan Community College, Penn Valley Campus, Education Center/Storm Shelter.................... p. 163
No supplier information available.

GSB, Inc. Architects & Planners

1140 N.W. 63rd St., Suite 500
Oklahoma City, OK 73116
405-848-9549

John Marshall High School.......... p. 111
Bleachers/Grandstands: Interkal. *Brick/Masonry*: Acme Brick. *Carpet*: Shaw. *Ceilings*: Armstrong. *Ceramic tile*: Crossville. *Chalkboards*: Newline. *Door hardware*: American Building Specialties. *Doors*: Marshfield. *Draperies/Blinds*: Hunter Douglas. *Elevators*: ThyssenKrupp. *Emergency lighting*: Day-Brite Lighting. *Fire/life-safety systems*: Larsen's. *Flooring*: Armstrong. *Hand-drying equipment*: American Specialties. *HVAC control devices, units*: Johnson Controls. *IAQ devices*: Johnson Controls. *Indoor lighting*: Day-Brite Lighting. *Kitchen equipment*: Keas, Masterbilt, Oswalt. *Lockers*: Murray Womble. *Locks*: American Building Specialties. *Markerboards*: Newline. *Movable partitions/walls*: Kentucky Metal. *Paint*: Spectrum Paint. *Physical-education flooring*: Aacer Flooring. *Plumbing*: Johnson Controls. *Scoreboards/Clocks*: Sportable Scoreboards. *Washroom accessories, fixtures*: American Specialties. *Washroom/shower partitions*: Comtec. *Windows*: Kawneer.

GSBS Architects

375 West 200 South
Salt Lake City, UT 84101
801-521-8600

Salt Lake Community College, Jordan Campus Health Sciences Center... p. 164
No supplier information available.

Hammond Beeby Rupert Ainge Inc.

440 N. Wells St., Suite 200
Chicago, IL 60610
312-527-3200

Yale University, Bass Library....... p. 165
Brick/Masonry: Kushwa Brick. *Carpet*: Bentley Prince St. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Door hardware*: Best, Von Duprin. *Doors*: Maiman. *Flooring*: Burlington. *Skylights*: Marston & Langinger. *Windows*: Crittal.

Harley Ellis Devereaux

601 S. Figueroa St., Suite 500
Los Angeles, CA 90017
213-542-4500

California State University Northridge, Arbor Grill & Court .... p. 166
No supplier information available.

California State University Northridge, Sol Center Student Union............ p. 167
No supplier information available.

Harriman

One Auburn Business Park
46 Harriman Drive
Auburn, ME 04210
207-784-5100

Bridgton Academy, Humanities Center .... p. 170
Auditorium/assembly furniture: American Seating. *Brick/Masonry*: Morin Brick. *Cabinets*: Pionite. *Carpet*: Cambridge, Collins & Aikman, Mohawk. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Doors*: Marshfield. *Elevators*: ThyssenKrupp. *Emergency lighting*: Cooper Lighting. *Fire/life-safety systems*: Silent Knight. *Flooring*: American Olean, Azrock, Johnsonite. *Indoor lighting*: Bruck, Cooper Lighting, LAM. *Locks*: Schlage. *Markerboards*: Polyvision. *Paint*: Benjamin Moore, Sherwin-Williams. *Roofing*: Certainteed. *Washroom accessories*: Bobrick. *Windows*: Marvin.

University of Southern Maine, Residence Hall ....p. 168-169
Brick/Masonry: LaChance, Morin. *Cabinets*: Armstrong. *Carpet*: Collins & Aikman. *Ceilings*: Celotex, USG. *Ceramic tile*: Dal-Tile. *Door hardware*: Best Access, LCN, Sargent, Stanley. *Doors*: Curries, Marshfield. *Elevators*: ThyssenKrupp. *Emergency lighting*: Belfer, Cooper Lighting, Teron. *Fire/life-safety systems*: Notifier. *Flooring*: Decoria. *HVAC control devices*: Delta. *HVAC units*: McQuay, Semco. *IAQ devices*: Graystone. *Indoor lighting*: Belfer, Cooper Lighting, Teron. *Insulation*: Dow, Owens Corning. *Locks*: Best Access. *Paint*: Sherwin-Williams. *Roofing*: Firestone. *Washroom fixtures*: Zurn. *Windows*: Boyd, Kawneer.

Harvard Jolly, Inc.

2714 Dr. Martin Luther King Jr. St. N.
St. Petersburg, FL 33704
727-896-4611

Seminole Community College, SCC-UCF University Partnership Center... p. 305
No supplier information available.

Hastings & Chivetta Architects, Inc.

700 Corporate Park Drive, Suite 400
St. Louis, MO 63105
314-863-5717

Barat Academy.............................. p. 112
Athletic equipment: Performance Sports Systems, Sports Imports. *Bleachers/Grandstands*: Kodiak Industries. *Carpet*: Bigelow. *Door hardware*: Schlage. *Doors*: VT Industries. *Draperies/Blinds*: Hunter Douglas. *Elevators*: Schindler. *Fire/life-safety systems*: Larsen's, Tyco. *Indoor lighting*: Cooper Lighting. *Physical-education flooring*: Robbins Sports Surfaces. *Plumbing*: Chicago Faucets. *Scoreboards/Clocks*: Fair-Play Scoreboards. *Washroom accessories*: Knickerbocker Partitions. *Washroom fixtures*: Bradley.

University of Tulsa, Collins Hall Welcome Center .... p. 171
Carpet: Constantine, Karastan. *Ceilings*: USG. *Flooring*: Dal-Tile, Johnsonite. *Office furniture*: Kimball, National Office Furniture. *Other*: Sandler Seating. *Paint*: Pittsburgh Paints. *Washroom fixtures*: Bradley.

Hellmuth, Obata + Kassabaum, Inc. (HOK)

9530 Jefferson Blvd.
Culver City, CA 92407
310-838-9555

California State University—San Bernardino, Student Recreation Center .... p. 172
Athletic equipment: L.A. Gym Equipment. *Cabinets*: Greasean Industries. *Carpet*: Tangram. *Ceilings*: Acousticraft. *Ceramic tile*: Premiere Tile & Marble. *Door hardware, Doors*: Complete Door Systems. *Elevators*: Kone. *Fire/life-safety systems*: Yamas. *Flooring*: Jaydan. *Hand-drying equipment*: Global Steel Products. *Insulation*: Dittmore. *Laundry equipment*: Unimac. *Lockers*: Smart Card. *Paint*: South Coast Coatings. *Physical-education flooring*: Floor Seal Technology. *Signage*: Architectural Sign & Graphics. *Washroom accessories, fixtures, Washroom/shower partitions*: Global Steel Products.

Hellmuth, Obata + Kassabaum, Inc. (HOK)

2711 N. Haskell Ave., Suite 2250
Dallas, TX 75204
214-720-6000

Dallas County Community College District, Cedar Valley College, Science/Veterinary Technology/Allied Health Building................................ p. 306-307
No supplier information available.

HFSArchitects

1484 S. State St.
Salt Lake City, UT 84115
801-596-0691

Jordan Applied Technology Center... p. 240
Brick/Masonry: Interstate Brick. *Carpet*: Lees. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Clocks/Time management*: Marshall Industries. *Door hardware*: Schlage. *Doors*: Marshfield. *Draperies/Blinds*: Bali. *Drinking fountains*: Elkay. *Elevators*: Otis. *Emergency lighting*: Prescolite. *Fire/life-safety systems*: Reliable Sprinkler Co. *Flooring*: Nora, Tarkett. *Hand-drying equipment*: Elkay. *HVAC control devices*: Johnson Controls. *HVAC units*: Unitech. *Indoor lighting*: Columbia Lighting. *Insulation*: Owens Corning. *Lockers*: Republic Storage. *Locks*: Schlage. *Markerboards*: ADP Lemco. *Movable partitions/walls*: Modernfold. *Paint*: Sherwin-Williams. *Plumbing*: American Standard. *Roofing*: Siplast. *Science furniture*: Fisher Hamilton. *Skylights*: Kalwall. *Washroom fixtures*: Elkay. *Washroom/shower partitions*: Flush-Metal Partitions. *Windows*: PPG.

HHSDR Architects/Engineers

40 Shenango Ave.
Sharon, PA 16146
724-981-8820

Logan Middle School .... p. 83
Athletic equipment: Jaypro. *Auditorium/assembly furniture*: Hussey Seating. *Cafeteria furniture*: KI. *Carpet*: Shaw. *Ceilings*: Guilford of Maine, Wilsonart. *Ceramic tile*: American Olean. *Chalkboards*: Polyvision. *Classroom furniture*: KI. *Draperies/*

Blinds: Bali, Springs Window Fashions. *Elevators*: Schindler. *Flooring*: Armstrong, Forbo. *Library/media center furniture*: Brodart. *Lockers*: Republic. *Markerboards, Multipurpose areas furniture*: Polyvision. *Paint*: Sherwin-Williams. *Roofing*: Firestone. *Science furniture*: Polyvision. *Windows*: U.S. Aluminum.

Hight-Jackson Associates, PA

5201 Village Parkway, Suite 300
Rogers, AR 72758
479-464-4965

Cooper Elementary School .... p. 52
Carpet: Mannington, Patcraft. *Ceramic tile*: Dal-Tile. *Elevators*: ThyssenKrupp. *Emergency lighting*: Exitronics. *Fire/life-safety systems*: Fire Lite Systems, Tyco Fire Products. *Flooring*: Armstrong, Johnsonite, Nora Rubber Flooring. *HVAC control devices*: Climate Masters, Johnson Controls. *HVAC units*: Climate Masters. *Indoor lighting*: LAM, LSI, PMC Lighting. *Markerboards*: Claridge. *Paint*: Sherwin-Williams. *Physical-education flooring*: Wimbeldon. *Signage*: Mohawk Sign Systems. *Washroom/shower partitions*: Columbia.

HMC Architects

766 E. Colorado Blvd., Suite 200
Pasadena, CA 91101
626-535-0500

High School for the Visual and Performing Arts .... p. 308
No supplier information available.

HMFH Architects, Inc.

130 Bishop Allen Drive
Cambridge, MA 02139
617-492-2200

Beaver Country Day School, Athletic Center... p. 241
Athletic equipment: Porter Athletic Equipment. *Bleachers/Grandstands*: Hussey Seating. *Brick/Masonry*: Vermont Brick. *Ceilings*: USG. *Ceramic tile*: Dal-Tile. *Clocks/Time management*: Sapling. *Doors*: Algoma. *Draperies/Blinds*: MechoShade. *Drinking fountains*: Halsey Taylor. *Emergency lighting*: McPhilben. *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Armstrong. *HVAC control devices*: Honeywell. *HVAC units*: Trane. *Indoor lighting*: Day-Brite, SPI Lighting. *Lockers*: Republic. *Markerboards*: Claridge. *Paint*: Benjamin Moore. *Physical-education flooring*: Robbins Sports Surfaces. *Roofing*: Firestone, GAF. *Scoreboards/Clocks*: Daktronics. *Security systems*: G.E. *Washroom accessories*: Bradley. *Washroom fixtures*: American Standard. *Washroom/shower partitions*: Trespa. *Windows*: EFCO.

East Fairhaven Elementary School.. p. 53
Brick/Masonry: Endicott Clay Products, Jandris, Trenwyth, Yankee. *Ceilings*: Armstrong, Ecophone. *Ceramic tile*: Dal-Tile. *Doors*: Apex Steel Frames. *Insulation*: Certainteed, Johns Manville, National Gypsum. *Paint*: Sherwin-Williams. *Roofing*: Morin, Sarnafil. *Skylights*: Velux. *Windows*: Graham.

Hoener Associates, Inc., Architects

6707 Plainview Ave.
St. Louis, MO 63109
314-781-9855,

Hillsboro R-III School District, Athletic Complex.......................... p. 242
Athletic equipment: AALCO. *Brick/Masonry*: Kirchner Block & Brick. *Cabinets*: Wilsonart. *Door hardware*: Schlage. *Doors*: Special-Lite. *Drinking fountains*: Haws. *Emergency lighting*: Columbia Lighting, Hubbell Lighting. *Indoor lighting*: Columbia Lighting, Hubbell Lighting. *Kitchen equipment*: Advanced Tabco. *Locks*: Schlage. *Other*: American Flagpole. *Paint*: Sherwin-Williams. *Plumbing*: Kohler, Sloan, Zurn. *Roofing*: Certainteed. *Washroom fixtures*: Advanced Tabco, Kohler. *Washroom/shower partitions*: General Partitions. *Windows*: Winco.

Holt High School, Addition and Renovations................................... p. 280
Brick/Masonry: Kirchner Block & Brick. *Cabinets*: LSI. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Door hardware*: Best, Hager, National Guard, Precision. *Doors*: Curries, Marshfield. *Draperies/Blinds*: Bali. *Drinking fountains*: Halsey Taylor. *Elevators*: Schindler. *Emergency lighting*: Cooper Lighting. *Fire/life-safety systems*: Edwards System Technology. *Flooring*: Armstrong. *HVAC control devices*: Reliable. *HVAC units*: McQuay. *Indoor lighting*: Metalux. *Insulation*: Owens Corning. *Kitchen equipment*: Amco, Blodgett, Hatco, Hobart, True. *Lockers*: Republic Storage Systems. *Locks*: Best Locks. *Markerboards*: Claridge. *Paint*: Sherwin-Williams. *Plumbing*: Crane, Eljer, Kohler, Sloan. *Roofing*: Carlisle. *Signage*: American Signage. *Washroom accessories, fixtures*: ASI. *Washroom/shower partitions*: Comtec. *Windows*: EFCO.

HSMM AECOM

1315 Franklin Road
Roanoke, VA 24016
540-857-3257

Virginia Western Community College, Webber Hall Addition and Renovations.................................... p. 173
Brick/Masonry: Boxley Block. *Ceilings*: Armstrong. *Door hardware*: Corbin Russwin, Graham, Ives, LCN, Markar, Stanley, Steelcraft, Von Duprin. *Doors*: EFCO, Graham. *Drinking fountains*: Halsey Taylor. *Elevators*: ThyssenKrupp. *Fire/life-safety systems*: SimplexGrinnell. *HVAC control devices*: Invensys. *HVAC units*: Trane. *Indoor lighting*: Altman, Davis Muller, Gotham, Lithonia Lighting, Peerless, Scott Architectural Light. *Insulation*: Firestone Building Products. *Markerboards*: Newline. *Movable partitions/walls*: USG. *Other*: Carboline. *Paint*: Sherwin-Williams. *Plumbing*: American Standard, Bell & Gossett, Halsey Taylor, Rheem, Sioux Chief, Watts, Woodford, Zoeller, Zurn. *Roofing*: Firestone Building Products. *Washroom fixtures*: American Standard. *Washroom/shower partitions*: Metpar. *Windows*: EFCO, Viracon. *Wire management*: Wiremold.

Hunt Engineers, Architects & Land Surveyors, PC

Airport Corporate Park,
100 Hunt Center
Horseheads, NY 14845-1019
607-358-1000

J. Sloat Fassett Elementary School... p. 281
No supplier information available.

ikon.5 architects

864 Mapleton Road, Suite 100
Princeton, NJ 08540
609-919-0099

The College of New Rochelle, The Center for Wellness .... p. 174
Athletic equipment: Draper, Spalding. *Ceramic tile*: American Olean. *Draperies/Blinds*: MechoShade. *Elevators*: ThyssenKrupp. *HVAC control devices*: Alberton. *HVAC units*: Trane. *Movable partitions/walls*: Sky-Fold. *Office furniture*: Knoll. *Scoreboards/Clocks*: Daktronics. *Skylights*: Supersky.

Montclair State University, Café Diem .... p. 175
Cafeteria furniture: Brayton. *Ceilings*: USG. *Computer furniture*: Metro, Vecta. *Emergency lighting*: Emergi-Lite. *Flooring*: Forbo. *HVAC control devices*: Alerton. *Indoor lighting*: Color Kinetics, Foscarini. *Lounge furniture*: AGI. *Other*: 3Form. *Paint*: Sherwin-Williams. *Windows*: Kawneer.

James W. Buckley and Associates, Inc.

7 East Congress St., Suite 800
Savannah, GA 31401
912-447-1080

Bradwell Institute, Phases II and III .... p. 282
ADA/compliance equipment: ASI. *Brick/Masonry*: Boral Brick. *Carpet*: Collins & Aikman. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Communications systems*: Bogen. *Door hardware*: Dorma. *Doors*: Mohawk. *Drinking fountains*: Eljer. *Emergency lighting*: Lithonia. *Fire/life-safety systems*: Notifier. *Hand-drying equipment*: World Dryer. *HVAC control devices*: Johnson Controls. *HVAC units*: Trane. *IAQ devices*: Johnson Controls. *Indoor lighting*: Lithonia. *Insulation*: Johns Manville. *Kitchen equipment*: Alto Shaan, MarketForge. *Lockers*: Lyon. *Locks*: Best. *Markerboards*: American Visual Display. *Movable partitions/walls*: Dorma. *Paint*: Sherwin-Williams. *Plumbing*: Sloan. *Roofing*: Johns Manville. *Signage*: In-Pro. *Skylights*: Kalwall. *Washroom accessories*: ASI. *Washroom fixtures*: Kohler. *Washroom/shower partitions*: Columbia Partitions. *Waste receptacles*: ASI. *Windows*: YKK.

JCJ Architecture

38 Prospect St.
Hartford, CT 06103
860-247-9226

***Regional Center for the Arts ...... p. 224**
Auditorium/assembly furniture: Irwin Seating, Jhane Barnes Textiles. *Carpet*: Masland. *Ceilings*: Armstrong, USG. *Ceramic tile*: Dal-Tile. *Classroom furniture*: Virco, Wenger. *Computer furniture*: Smith Systems. *Draperies/Blinds*: J.R. Clancy, KM Fabrics. *Flooring*: Armstrong, Harlequin, Johnsonite, L.M. Scofield, Mannington, Meditech, Robbins. *Lockers*: Penco. *Lounge furniture*: Virco. *Markerboards*: United Blackboard & Specialties. *Office furniture*: HON. *Other*: Forbo, Knoll, Maharam. *Paint*: Benjamin Moore, Sherwin-Williams. *Roofing*: Versico. *Signage*: ISI Intelligent Signage. *Washroom fixtures*: Kohler.

JSA Inc.

55 Green St.
Portsmouth, NH 03801
603-436-2551

University of New Hampshire, Southeast Residential Community .... p. 309
No supplier information available.

Kaatz, Binkley, Jones & Morris Architects, Inc.

1008 Charlie Daniels Parkway
Mount Juliet, TN 37122
615-754-5393

Lexington Middle School .... p. 84
Athletic equipment: JayPro. *Auditorium/assembly furniture*: Track Seating. *Bleachers/Grandstands*: Irwin Seating. *Brick/Masonry*: Southern Concrete Products. *Cabinets*: Collegedale. *Carpet*: J&J Commercial, Mannington. *Ceilings*: Armstrong, USG. *Ceramic tile*: American Olean. *Doors*: Marshfield. *Drinking fountains*: Elkay. *Emergency lighting*: Lightolier. *Fire/life-safety systems*: Fire Control Instruments, Tyco. *Flooring*: Armstrong, Mannington, Tarkett. *Hand-drying equipment*: Bradley. *HVAC control devices, units*: Trane. *Indoor lighting*: Lightolier. *Insulation*: Carlisle. *Kitchen equipment*: Hobart, Kevinator, Thermo-Kool, True. *Library/media center furniture*: HON, Worden. *Markerboards*: Platinum Visual. *Other*: Ductsox. *Paint*: Porter Paints, Sherwin-Williams. *Physical-education flooring*: Robbins Sports Surfaces. *Plumbing*: Zurn. *Roofing*: Carlisle. *Skylights*: Kalwall. *Washroom accessories*: Bradley. *Washroom fixtures*: Bradley, Kohler. *Washroom/shower partitions*: Comtec. *Waste receptacles*: Rubbermaid. *Windows*: Kawneer.

Kallmann McKinnell & Wood Architects

181 Newbury St.
Boston, MA 02116
617-267-0808

Emory University, Robert C. Goizueta School of Business, Center for Doctoral Research and Education .... p. 176
No supplier information available.

University of California—Riverside, Physical Sciences Building 1........ p. 177
No supplier information available.

University of Missouri—Kansas City, Health Sciences Building, School of Pharmacy and School of Nursing.. p. 178
No supplier information available.

University of Texas at Austin, Jack S. Blanton Museum of Art............... p. 243
No supplier information available.

Wesleyan University, Suzanne Lemberg Usdan University Center .... p. 179
No supplier information available.

KCBA Architects

8 E. Broad St.
Hatfield, PA 19440
215-368-5806

Bucks County Community College, Lower Bucks Campus................... p. 180
Brick/Masonry: EP Henry, Watsontown Brick. *Cabinets*: LSI. *Cafeteria furniture*: Furniture Lab, KI, Metro. *Carpet*: Designweave, Monterey. *Ceilings*: Armstrong. *Ceramic tile*: Alabastro. *Classroom furniture*: Computer Comfort, Cramer, KI. *Clocks/Time management*: Electric Time Company, Primex Wireless. *Computer furniture*: Computer Comfort, Cramer. *Computer furniture*: KI. *Door hardware*: Curries, HES, LCN, McKinney, Rixson, Von Duprin. *Doors*: Marshfield. *Draperies/Blinds*: Draper. *Elevators*: Wilsonart. *Flooring*: Camara Slate Products. *HVAC control devices, units*: Redd-1 Heat Corp. *Insulation*: Armstrong, Bradco. *Kitchen equipment*: Devin Food Equipment. *Library/media center furniture*: Arcadia, Brodart, Metro. *Locks*: Corbin Russwin. *Lounge furniture*: Arcadia. *Markerboards*: Polyvision. *Movable partitions/walls*: Modernfold. *Multipurpose areas furniture*: Arcadia, Furniture Lab. *Office furniture*: Sit On It, Steelcase. *Paint*: Duron. *Science furniture*: Campbell Rhea. *Signage*: Spencer Industries. *Washroom/shower partitions*: Bobrick, Sierra. *Waste receptacles*: Landscape Forms. *Wire management*: Cablofil.

Kehoe-Henry & Associates, Inc.

32 S. Wisconsin St.
Elkhorn, WI 53121
262-723-4399

Badger High School, Art and Fitness Addition... p. 244
Athletic equipment: Draper, Life Fitness. *Bleachers/Grandstands*: Jaypro. *Brick/Masonry*: Glen Gery, Trenwyth. *Cabinets*: LSI. *Carpet*: Lees, Mohawk. *Ceilings*:

Tectum, USG. *Ceramic tile*: Dal-Tile. *Clocks/Time management*: Primex. *Door hardware*: Best Access. *Doors*: Lambton, Mesker. *Draperies/Blinds*: Hunter Douglas. *Drinking fountains*: Elkay. *Elevators*: ThyssenKrupp. *Emergency lighting*: McPhilben. *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Johnsonite, Mannington. *Hand-drying equipment*: Bradley. *HVAC control devices, units*: Trane. *Indoor lighting*: Capri, Day-Brite, Finelite. *Insulation*: Atlas, Owens Corning. *Markerboards*: Newline. *Movable partitions/walls*: Hufcor. *Other*: Air Master Systems, Bailey, Montel, Panel Crafters, Peerless. *Paint*: Sherwin-Williams. *Physical-education flooring*: Sport Court. *Plumbing*: Aero, Bradley, Zurn. *Roofing*: Carlisle. *Skylights*: Wisconsin Solar Design. *Washroom accessories*: Bradley. *Washroom fixtures*: Kohler, Moen, Zurn. *Washroom/shower partitions*: Capitol Partitions, Comtec. *Windows*: Moduline.

KGA Architecture

4495 S. Polaris
Las Vegas, NV 89103
702-367-6900

Bishop Gorman Catholic High School .... p. 113
Athletic equipment: Spalding. *Bleachers/Grandstands*: Alcoa, Hussey Seating. *Brick/Masonry*: Cind-R-Lite, Sunroc. *Cabinets*: Arborite, Hafele. *Cafeteria furniture*: National Public Seating. *Carpet*: Armstrong, Atlas, Shaw. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Classroom furniture*: KI. *Clocks/Time management*: Dynteck. *Communications systems*: Cisco. *Computer furniture*: Computer Comforts. *Computers*: HP. *Door hardware*: Sargent. *Doors*: Algoma. *Draperies/Blinds*: Graber, MechoShade. *Drinking fountains*: Elkay. *Emergency lighting*: Lithonia Lighting. *Flooring*: Armstrong. *HVAC units*: York. *Indoor lighting*: Bruck, Lithonia Lighting. *Insulation*: Owens Corning. *Kitchen equipment*: Amana, Fisher, Hussman. *Laundry equipment*: Alliance. *Library/media center furniture*: Bretford. *Lockers*: Debourgh, List. *Lounge furniture*: Brayton. *Markerboards*: Ergo. *Movable partitions/walls*: Hufcor. *Multipurpose areas furniture*: KI. *Office furniture*: KI, Steelcase. *Paint*: Sherwin-Williams. *Physical-education flooring*: Mondo USA. *Roofing*: Eagle. *Science furniture*: KI. *Scoreboards/Clocks*: Fairplay. *Washroom accessories*: Bobrick. *Washroom/shower partitions*: Comtec. *Windows*: Arcadia, Oldcastle.

KlingStubbins

1030 Massachusetts Ave.
Cambridge, MA 02138
617-250-4838

St. Lawrence University, Johnson Hall of Science .... p. 182-183
No supplier information available.

Koch Hazard Architects

431 N. Phillips, Suite 200
Sioux Falls, SD 57104
605-782-8732

Northern State University, Technology Center... p. 181
Brick/Masonry: Hebron. *Cabinets*: TMI. *Carpet*: Shaw. *Ceilings*: Celotex. *Ceramic tile*: American Olean. *Door hardware*: Hager, LCN, Von Duprin. *Doors*: VT Industries. *Draperies/Blinds*: Levelor. *Drinking fountains*: Oasis. *Elevators*: Otis. *Emergency lighting*: G.E. *Fire/life-safety systems*: JL Industries. *Flooring*: Mannington. *HVAC control devices*: Johnson Controls. *HVAC units*: McQuay. *Indoor lighting*: Focus, Lithonia. *Insulation*: Owens Corning. *Locks*: Schlage. *Markerboards*: Polyvision. *Plumbing*: American Standard. *Roofing*: Versigard. *Washroom accessories*: American Specialties. *Washroom/shower partitions*: Aamco. *Windows*: Tubelite.

Kovert Hawkins Architects, Inc.

630 Walnut St.
Jeffersonville, IN 47130
812-282-9554

Warsaw Community Schools, New Prototype Elementary School: Leesburg Elementary School and Madison Elementary School .... p. 310
No supplier information available.

KSQ Architects, PC

406 S. Boulder Ave., Suite 500
Tulsa, OK 74103
918-592-0622

Jenks Public Schools, Natatorium Complex.. p. 311
No supplier information available.

Sam Houston State University, Raven Village .... p. 184
Carpet: Collins & Aikman. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Flooring*: Dal-Tile, Mannington. *Indoor lighting*: Crescent, Evergreen. *Paint*: Sherwin-Williams.

Temple University, Housing Master Plan .... p. 322
No supplier information available.

University of Arkansas Little Rock, University Commons Apartments .... p. 185
Carpet: Lees. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Flooring*: Dal-Tile, Tarkett. *Paint*: Benjamin Moore, Sherwin-Williams.

LaMarr Womack & Associates, LP

711 N. Carancahua, Suite 404
Corpus Christi, TX 78475
361-884-7442

Banquete Elementary School........ p. 54
Athletic equipment: Performance Sports Systems. *Bleachers/Grandstands*: Sheridan. *Brick/Masonry*: Martini Brick. *Carpet*: Lees. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Door hardware*: Sargent. *Doors*: Graham. *Drinking fountains*: Elkay. *Emergency lighting*: Lithonia Lighting. *Flooring*: Armstrong. *Hand-drying equipment*: American Specialties. *HVAC control devices, HVAC units*: Carrier. *Indoor lighting*: Lithonia Lighting. *Insulation*: Dow. *Kitchen equipment*: Groen. *Library/media center furniture*: Brodart. *Locks*: Sargent. *Markerboards*: Greensteel. *Movable partitions/walls*: Imperial. *Paint*: ICI Paints. *Physical-education flooring*: Connor. *Plumbing*: Davis. *Roofing*: Garland. *Scoreboards/Clocks*: Spectrum. *Washroom accessories*: American Specialties. *Washroom fixtures*: Elkay, Kohler. *Washroom/shower partitions*: Global Partitions. *Windows*: Kawneer.

Benavides Elementary School .... p. 55
ADA/compliance equipment: Guardian. *Brick/Masonry*: Acme. *Cabinets*: Campbell Rhea. *Carpet*: Shaw. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Computer furniture*: Smith Systems. *Door hardware*: McKinney, Sargent. *Doors*: Vancouver Door Co. *Drinking fountains*: Elkay. *Emergency lighting*: Lithonia Lighting. *Flooring*: Tarkett. *Hand-drying equipment*: American Specialties. *HVAC control devices, units*: Lennox. *Indoor lighting*: Lithonia Lighting. *Insulation*: Pactiv. *Kitchen equipment*: Globe, Groen. *Library/media center furniture*: Brodart. *Lockers*: Penco. *Locks*: Sargent. *Markerboards*: Claridge. *Paint*:

Sherwin-Williams. *Roofing*: Tremco. *Science furniture*: Campbell Rhea. *Washroom accessories*: American Specialties. *Washroom fixtures*: Kohler. *Washroom/shower partitions*: Comtec. *Windows*: Kawneer.

LAN Associates, Engineering, Architecture, Planning, Surveying, Inc. (LAN)

445 Godwin Ave.
Midland Park, NJ 07432
201-447-6400

Fair Lawn High School .... p. 114
Brick/Masonry: Glen-Gery. *Cabinets*: LSI. *Carpet*: Milliken. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Chalkboards*: Claridge. *Childcare, Classroom furniture*: LSI. *Computer furniture*: KI. *Door hardware*: Schlage. *Doors*: Mohawk. *Drinking fountains*: Eljer. *Elevators*: Otis. *Emergency lighting*: Dual-Lite. *Flooring*: Azrock, Wausau Tile. *HVAC units*: Trane. *Indoor lighting*: Finelite. *Insulation*: Owens Corning. *Library/media center furniture*: KI. *Lockers*: Republic. *Locks*: Best. *Lounge furniture*: LSI. *Markerboards*: Claridge. *Office furniture*: LSI. *Paint*: Pittsburgh Paints. *Roofing*: Tamko. *Science furniture*: Sheldon. *Washroom accessories*: Bobrick. *Washroom fixtures*: American Standard. *Washroom/shower partitions*: Comtec. *Windows*: EFCO.

Legat Architects

2015 Spring Road, Suite 175
Oak Brook, IL 60523
630-990-3535

***Colin Powell Middle School .... p. 76**
Brick/Masonry: Chicago Block & Brick: Redland Brick. *Cabinets*: Stevens Industries. *Carpet*: Shaw. *Ceilings*: Celotex, Chicago Metallic. *Ceramic tile*: American Olean, Graniti Fiandre, Mannington. *Classroom furniture*: Virco. *Door hardware*: Ingersoll Rand. *Draperies/Blinds*: Draper. *Fire/life-safety systems*: Larsen's. *Flooring*: Armstrong, General Polymers, Gerbert Ecosurfaces, Johnsonite. *HVAC units*: Annex Air, Climatemaster. *Lockers*: DeBourgh. *Markerboards*: Polyvision. *Movable partitions/walls*: Modernfold. *Paint*: Sherwin-Williams. *Physical-education flooring*: Connor Sports Flooring, Taraflex. *Roofing*: Genflex. *Science furniture*: Virco. *Security systems*: SimplexGrinnell. *Washroom accessories*: American Specialties. *Washroom/shower partitions*: Accurate Partitions. *Windows*: Kawneer, Oldcastle Glass.

Legat & Kingscott, LLC

88 E. Broad St., Suite 1200
Columbus, OH 43215
888-454-5437

Cherry Valley Elementary School .... p. 56
Athletic equipment: Jaypro. *Brick/Masonry*: Bowerston Shale. *Brick/Masonry*: Oberfields. *Cabinets*: Stevens. *Cafeteria furniture*: Bio Fit. *Carpet*: Mannington. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Chalkboards*: Marsh. *Classroom furniture*: Virco. *Clocks/Time management*: Primex. *Communications systems*: Cisco. *Computer furniture*: Interior Concepts. *Door hardware*: Schlage, Von Duprin. *Doors*: Algoma. *Drinking fountains*: Elkay. *Elevators*: ThyssenKrupp. *Emergency lighting*: Hubbell. *Fire/life-safety systems*: Edwards Systems. *Flooring*: Mannington. *HVAC control devices*: Johnson Controls. *HVAC units*: Trane. *IAQ devices*: Johnson Controls. *Indoor lighting*: G.E, Hubbell. *Insulation*: Owens Corning. *Kitchen equipment*: Delfield. *Library/media center furniture*: Brodart. *Lockers*: Republic. *Locks*: Schlage. *Lounge furniture*: Brodart. *Markerboards*: Marsh. *Movable partitions/walls*: Hufcor. *Office furniture*: All Steel. *Paint*: ICI. *Physical-education flooring*: Nora. *Plumbing*: Zurn. *Roofing*: Genflex, MetalWorx. *Security systems*: NAPCO. *Signage*: REM Graphics. *Washroom accessories*: Bradley. *Washroom fixtures*: Zurn. *Washroom/shower partitions*: Ampco. *Windows*: Graham. *Wire management*: B-Line.

Leo A Daly

8600 Indian Hills Drive
Omaha, NE 68114
402-391-8111

Roberts Wesleyan College, Golisano Library .... p. 188
ADA/compliance equipment: Otis. *Cafeteria furniture*: Herman Miller. *Card systems*: SimplexGrinnell. *Carpet*: Blueridge Commercial, Durkan, Mohawk. *Ceilings*: Armstrong. *Ceramic tile*: Zoller. *Classroom furniture*: Allsteel. *Clocks/Time management*: SimplexGrinnell. *Communications systems*: SimplexGrinnell. *Computer furniture*: Allsteel. *Drinking fountains*: Elkay. *Elevators*: Otis. *Emergency lighting*: Elite, Gardco, Gotham, Lightolier, Lithonia. *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Pawling. *Hand-drying equipment*: Sloan. *HVAC control devices*: Day Automation Systems. *HVAC units*: McQuay, Trane. *IAQ devices*: Day Automation Systems. *Indoor lighting*: Elite, Gardco, Gotham, Lightolier, Lithonia. *Insulation*: Certainteed. *Library/media center furniture*: Agati, Cabot Wrenn, Herman Miller. *Locks*: SimplexGrinnell. *Lounge furniture*: Krug, Martin Brattrud. *Multipurpose areas furniture*: Agati. *Office furniture*: Allsteel. *Paint*: Sherwin-Williams. *Plumbing*: Landry. *Roofing*: Zurn. *Security systems*: SimplexGrinnell. *Washroom accessories*: GreenGuard Formica. *Washroom fixtures*: American Standard, Kohler, Sloan. *Windows*: EFCO.

Leo A Daly

550 S. Hope St.
Los Angeles, CA 90071-2627
213-629-0100

University of California—Irvine, California Institute of Telecommunications and Information Technology (Cal IT^2) .... p. 186-187
Auditorium/assembly furniture: Steelcase. *Cabinets*: Dow. *Cafeteria furniture*: Steelcase. *Carpet*: Bigelow. *Ceilings*: USG. *Ceramic tile*: Dal-Tile. *Classroom, Computer furniture*: Steelcase. *Door hardware*: Best, Von Duprin. *Doors*: Eggers. *Draperies/Blinds*: Graber. *Drinking fountains*: Haws. *Elevators*: Mitsubishi. *Emergency lighting*: Lithonia. *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Dal-Tile, Mannink. *HVAC control devices*: Siemens. *HVAC units*: United Metal Products. *Indoor lighting*: Lithonia. *Library/media center furniture*: Steelcase. *Locks*: Best. *Lounge furniture, Movable partitions/walls, Multipurpose areas furniture, Office furniture, Residence hall furniture*: Steelcase. *Roofing*: Johns Manville. *Science furniture*: Steelcase. *Security systems*: Card-Sky. *Washroom accessories, fixtures*: Sloan. *Washroom/shower partitions*: Bobrick. *Windows*: Tajima.

Lerner | Ladds + Bartels, Inc.

236 Hope St.
Providence, RI 02906
401-421-7715

Johnson & Wales University, Xavier Auditorium.................................... p. 189
No supplier information available.

Lesko Associates, Inc.

27955 Clemens Road, Suite A
Cleveland, OH 44145
440-835-0850

Fairless Middle School.................. p. 85
Athletic equipment: Porter Athletic. *Bleachers/Grandstands*: Interkal. *Cabinets*: TMI Systems, Wilsonart. *Carpet*: Mannington. *Ceilings*: USG. *Ceramic tile*: American Olean. *Clocks/Time management*: Paladin Professional Sound. *Door hardware*: Schlage. *Doors*: Graham. *Draperies/Blinds*: Window Accessory Co. *Fire/life-safety systems*: Tyco Fire Products. *Flooring*: Mannington. *HVAC control devices, units*: Trane. *Indoor lighting*: Day-Brite Lighting. *Kitchen equipment*: Champion, South Bend. *Lockers*: Republic. *Locks*: Von Duprin. *Markerboards*: Marsh Industries. *Movable partitions/walls*: Modernco. *Other*: Koroseal. *Paint*: Sherwin-Williams. *Physical-education flooring*: Connor. *Roofing*: Certainteed. *Scoreboards/Clocks*: Knight Athletics. *Signage*: Columbus Graphics. *Washroom accessories*: Bradley. *Washroom fixtures*: Kohler. *Washroom/shower partitions*: General Partitions. *Windows*: Wausau Window & Wall Systems.

Little

5815 Westpark Drive
Charlotte, NC 28217
704-561-4556

Surry Community College, North Carolina Center for Viticulture & Enology .... p. 301
No supplier information available.

Livas Group Architects, PC

246 W. Freemason St.
Norfolk, VA 23510
757-627-0896

Hampton University, Student Dining and Activity Hall .... p. 312
No supplier information available.

LPA, Inc.

5161 California Ave., Suite 100
Irvine, CA 92612
949-261-1001

California State University—San Bernardino, College of Education Building .... p. 190
Auditorium/assembly furniture: American Seating. *Carpet*: Pro Spectra Flooring. *Elevators*: Mitsubishi. *Insulation*: Insulcom. *Office furniture*: Office Furniture Group. *Signage*: Architectural Sign Identity, Inc.

LPA, Inc.

5161 California Ave., Suite 100
Irvine, CA 92617
949-261-1001

Cuyamaca Community College District, Cuyamaca College Student Center ....p. 141
Brick/Masonry: Angeles Block Co., Orco Block Co. *Card systems*: Kaba. *Carpet*: Interface, Shaw. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Clocks/Time management*: Primex Wireless. *Door hardware*: Hager, Ives, Pemko, Schlage. *Doors*: Amweld, Ceco Door Products, Steelcraft. *Draperies/Blinds*: MechoShade. *Drinking fountains*: Acorn. *Elevators*: ThyssenKrupp. *Emergency lighting*: McPhilben. *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Armstrong. *Hand-drying equipment*: Bobrick. *HVAC control devices*: Bactalk. *HVAC units*: Air Enterprises, Covernair, Energy Lab. *Indoor lighting*: Lithonia, Louis Poulsen, Omega, Tre Ci Luce. *Insulation*: CertainTeed, Owens Corning, USG. *Markerboards*: Polyvision. *Plumbing*: Apollo, Mifab, Toto, Watts, Wilkins, Zurn. *Roofing*: Johns Manville. *Signage*: Architectural Sign Identity. *Skylights*: Architectural Skylight Co. *Washroom accessories*: Bobrick. *Washroom fixtures*: American Standard, Elkay, Just Mfg., Kohler. *Washroom/shower partitions*: Bobrick, Trespa. *Windows*: U.S. Aluminum.

Lyman Davidson Dooley, Inc.

1640 Powers Ferry Road, Building 1, Suite 100
Marietta, GA 30067
770-850-8494

Georgia Southern University, Recreation Activity Center (RAC) .... p. 245
Athletic equipment: Athletica, Porter, Schelde. *Brick/Masonry*: Cherokee. *Carpet*: Interface. *Ceilings*: Armstrong, Donn, USG. *Ceramic tile*: Crossville, Dal-Tile, DualTech. *Chalkboards*: Claridge. *Clocks/Time management*: Daktronics. *Computers*: Dell. *Door hardware*: Schlage. *Doors*: Marshfield. *Draperies/Blinds*: Bali, MechoShade. *Drinking fountains*: Elkay. *Elevators*: ThyssenKrupp. *Emergency lighting*: Cooper Lighting. *Fire/life-safety systems*: Edwards Systems Technology. *Flooring*: Johnsonite, Marmoleum. *Hand-drying equipment*: ASI. *HVAC control devices*: Johnson Controls. *HVAC units*: Marley, Poolpak, York. *IAQ devices*: DuctSox. *Indoor lighting*: Cooper Lighting. *Insulation*: Dow, Owens Corning. *Kitchen equipment*: G.E., Manitowoc. *Lockers*: Comtec. *Markerboards*: Claridge. *Paint*: PPG. *Physical-education flooring*: Robbins. *Plumbing*: Kohler, PolyDrain. *Roofing*: Fabral, Johns Manville. *Scoreboards/Clocks*: Daktronics. *Skylights*: Naturalite, Vistawall. *Washroom accessories*: ASI. *Washroom fixtures*: Chicago, Kohler, Zurn. *Washroom/shower partitions*: Comtec. *Waste receptacles*: ASI. *Windows*: Major Industries, Viracon.

MacLachlan, Cornelius & Filoni

200 The Bank Tower, 307 Fourth Ave.
Pittsburgh, PA 15222
412-281-6568

Franciscan University of Steubenville, Sts. Louis and Elizabeth Residence Halls ....p. 191
No supplier information available.

University of Pittsburgh, Litchfield Towers Dining............................... p. 283
No supplier information available.

Mosaic Associates (formerly Dodge Chamberlin Luzine Weber Associates Architects)

73 Troy Road
East Greenbush, NY 12061
518-479-4000

Shatekon Elementary School .... p. 57
Brick/Masonry: Glen Gery. *Cabinets*: Metal Industries. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Draperies/Blinds*: Springs Window Fashions. *Emergency lighting*: Lithonia Lighting. *Fire/life-safety systems*: Johnson Controls. *Flooring*: Armstrong. *Indoor lighting*: Gammalux, Lithonia

Lighting. *Library/media center furniture*: TESCO. *Markerboards*: Claridge. *Paint*: Sherwin-Williams. *Physical-education flooring*: Action Floor Systems. *Roofing*: Firestone Building Products. *Skylights*: Vistawall. *Washroom/shower partitions*: Capitol Partitions, Comtec, Santana. *Windows*: Litex.

Moseley Architects, PC

3000 RDU Center Drive, Suite 217
Morrisville, NC 27560
919-840-0091

Carrboro High School.................. p. 116
Auditorium/assembly furniture: KI, Wenger. *Bleachers/Grandstands*: Irwin Seating. *Brick/Masonry*: Oldcastle. *Cabinets*: Wilsonart. *Cafeteria furniture*: Izzy Design, KI. *Card systems*: 3M. *Carpet*: Interface. *Ceilings*: Celotex. *Ceramic tile*: Dal-Tile. *Classroom furniture*: KI, Smith Systems, Verstad, Virco. *Computer furniture*: HON, Virco. *Door hardware*: Corbin Russwin, Von Duprin. *Doors*: Special Lite, VT Industries. *Draperies/Blinds*: Hunter Douglas. *Elevators*: ThyssenKrupp. *Fire/life-safety systems*: Siemens. *Flooring*: Mannington. *Insulation*: Guardian. *Kitchen equipment*: Delfield. *Laundry equipment*: Belco, G.E. *Library/media center furniture*: Brayton, Izzy Design, Tesco. *Lockers*: List Industries. *Lounge furniture*: Brayton, High Point Furniture. *Markerboards*: Newline. *Office furniture*: Allsteel, Sit On It, Stylex. *Paint*: Duron. *Physical-education flooring*: Connor. *Science furniture*: Sheldon, Virco. *Signage*: Gemini, Mohawk Sign Systems. *Washroom/shower partitions*: Bradley, Comtec.

Moseley Architects, PC

780 Lynnhaven Parkway, Suite 200
Virginia Beach, VA 23452
757-368-2800

Longwood University, Health and Wellness Center ....p. 192-193
Brick/Masonry: Continental Cast Stone, Essroc, Lawrenceville Brick. *Cabinets*: Columbia Forest Products, Dupont, Wilsonart. *Carpet*: Interface. *Ceilings*: USG. *Ceramic tile*: American Marazzi, Dal-Tile. *Door hardware*: Stanley. *Doors*: Algoma, Overhead Door, Steelcraft. *Elevators*: ThyssenKrupp. *Insulation*: Guardian Fiberglass. *Paint*: ICI Paints. *Roofing*: Carlisle Syntec. *Windows*: Kawneer.

Virginia Commonwealth University, School of Business and School of Engineering........................... p. 194-195
Brick/Masonry: Arriscraft, Essroc, Soundblox, Taylor Clay. *Cabinets*: Sigma Systems. *Ceilings*: Armstrong. *Ceramic tile*: Crossville, Dal-Tile. *Door hardware*: Horton Automatics. *Doors*: Ceco. *Elevators*: Otis. *Insulation*: Johns Manville. *Movable partitions/walls*: Hufcor. *Paint*: Duron. *Plumbing*: Elkay. *Roofing*: Johns Manville, Owens Corning. *Skylights*: Linetec, Super Sky Products. *Windows*: Kawneer.

Moseley Architects, PC

11430 N. Community House Road, Suite 225
Charlotte, NC 28277
704-540-3755

Nation Ford High School............. p. 117
ADA/compliance equipment: Bradley. *Athletic equipment*: Spaulding. *Bleachers/Grandstands*: Irwin Seating. *Cabinets*: Stevens Industries. *Carpet*: Shaw. *Ceilings*: Armstrong. *Communications systems*: Yamaha. *Door hardware*: Von Duprin, Yale. *Doors*: Steelcraft, VT Industries. *Elevators*: ThyssenKrupp. *Emergency lighting*: H.E. Williams. *Fire/life-safety systems*: Edwards Systems Technology, Larsen's. *Flooring*: Armstrong, Johnsonite. *HVAC control devices, units*: Yamas. *Indoor lighting*: Beta Calco, H.E. Williams, LSI. *Insulation*: Georgia-Pacific. *Library/media center furniture*: Tesco. *Lockers*: Republic Storage Systems. *Locks*: Corbin Russwin. *Markerboards*: Polyvision. *Movable partitions/walls*: USG. *Other*: Draper. *Paint*: Pittsburgh Paint. *Plumbing*: American Standard, Ceco, Zurn. *Roofing*: Stevens Roofing Systems. *Science furniture*: Campbell Rhea. *Washroom accessories*: Bradley. *Washroom fixtures*: American Standard, Ceco, Zurn. *Washroom/shower partitions*: Comtec.

Moseley Architects, PC

601 Southlake Blvd.
Richmond, VA 23236
804-794-7555

T.C. Williams High School........... p. 118
No supplier information available.

Warhill High School..................... p. 119
No supplier information available.

Mount Vernon Group Architects, Inc.

20 Cabot Road
Woburn, MA 01801
781-937-9720

Amesbury High School, Addition and Renovations.................................. p. 284
No supplier information available.

MSKTD & Associates, Inc.

1715 Magnavox Way
Fort Wayne, IN 46804
260-432-9337

Ball State University, David Letterman Communication and Media Building... p. 196
ADA/compliance equipment: LCN. *Auditorium/assembly furniture*: American Seating. *Brick/Masonry*: Belden Brick, Indiana Limestone. *Card systems*: Stanley Systems. *Carpet*: Shaw. *Ceilings*: Armstrong, Con Wed. *Ceramic tile*: Crossville. *Door hardware*: Best, Stanley, Von Duprin. *Doors*: Marshfield. *Draperies/Blinds*: MechoShade. *Drinking fountains*: Elkay. *Elevators*: Schindler. *Emergency lighting*: Cooper Lighting. *Fire/life-safety systems*: Greenheck, Notifier. *Flooring*: Mannington. *HVAC control devices, units, IAQ devices*: Trane. *Indoor lighting*: Focal Point, Lite Control, Metalux, Visa. *Insulation*: Knauf, Owens Corning. *Lockers*: Republic. *Locks*: Best. *Lounge furniture*: Steelcase. *Office furniture*: Steelcase. *Paint*: Sherwin-Williams. *Plumbing*: Kohler. *Roofing*: Firestone. *Washroom accessories*: Bobrick. *Washroom fixtures*: Kohler. *Washroom/shower partitions*: Bobrick. *Windows*: Viracon, YKK.

Manchester College, Union Addition and Renovation............................ p. 285
ADA/compliance equipment: Elkay. *Auditorium/assembly furniture, Cafeteria furniture*: Versteel. *Carpet*: Bentley, Interface. *Ceramic tile*: Dal-Tile, Mannington. *Door hardware*: Casma, Von Duprin. *Doors*: Eliason, Marshfield. *Draperies/Blinds*: Draper, Flexshade. *Drinking fountains*: Elkay. *Emergency lighting*: Cooper Lighting. *Fire/life-safety systems*: Koorsen, Reliable, Victaulic. *Flooring*: Armstrong, Polyflor. *Hand-drying equipment*: Bobrick. *HVAC control devices*: Staefa. *HVAC units*: Carrier. *IAQ devices*: Staefa, Veris. *Indoor lighting*: Cooper Lighting. *Kitchen equipment*: Avtec, English, Hatco, Hobart, Mieko, Select Stainless, Vulcan. *Lockers*: Penco. *Locks*: Best, Hager. *Movable partitions/*

walls: Hufcor. *Office furniture*: Versteel. *Other*: AlucoBond, Overhead Door. *Paint*: Pittsburgh Paints, Porter Paints. *Plumbing*: American Standard. *Roofing*: Carlisle. *Washroom accessories*: Bobrick. *Washroom fixtures*: American Standard. *Washroom/shower partitions*: Capitol Partitions, Santana. *Windows*: Oldcastle Glass, YKK.

MVE Institutional, Inc.

1900 Main St., Suite 800
Irvine, CA 92614
949-809-3380

Oxnard College, Performing Arts Classroom and Auditorium .... p. 313
No supplier information available.

University of San Diego, Missions Student Housing and Cafe/Fitness Center... p. 197
No supplier information available.

Newman Architecture

1730 Park St., Suite 115
Naperville, IL 60563
630-420-1600

Cambridge Lakes Learning Center... p. 58
Brick/Masonry: Nichiha. *Carpet*: Mannington. *Ceilings*: USG. *Ceramic tile*: Dal-Tile. *Flooring*: Armstrong, Tarkett. *Indoor lighting*: Finelite. *Paint*: Sherwin-Williams. *Roofing*: Mulehide. *Skylights*: Solatube.

Niles Bolton Associates

3060 Peachtree Road N.W., Suite 600
Atlanta, GA 30305
404-365-7600

The Howard School .... p. 246
Athletic equipment: AALCO, AK Athletic, Spalding. *Auditorium/assembly furniture*: Highsmith, Keilhauer. *Bleachers/Grandstands*: Interkal. *Cafeteria furniture*: Mity Lite, Walker Display. *Carpet*: Interface, Patcraft. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Classroom furniture*: Scholarcraft, Smith Systems. *Computer furniture*: Lacasse. *Door hardware*: Rockwood, Schlage. *Doors*: Marshfield, Overhead Door. *Draperies/Blinds*: Bali. *Drinking fountains*: Elkay, Oasis. *Elevators*: ThyssenKrupp. *Emergency lighting*: Atlantic Lighting, Lightolier. *Fire/life-safety systems*: G.E. *Flooring*: Mannington. *HVAC control devices*: Viconics. *HVAC units*: Trane. *Indoor lighting*: Lightolier, Prudential. *Insulation*: Knaue. *Kitchen equipment*: Delfield, G.E., Scotsman. *Laundry equipment*: Kenmore. *Library/media center furniture*: Blanton & Moore, Gunlocke. *Lockers*: Art Metal. *Locks*: Rockwood, Schlage. *Lounge furniture*: Danko, Harter. *Markerboards*: Polyvision. *Movable partitions/walls*: Hufcor. *Multipurpose areas furniture*: HON, Keilhauer. *Office furniture*: Global, KI, Lacasse, United. *Paint*: Benjamin Moore, Sherwin-Williams. *Physical-education flooring*: Mondo. *Playground equipment*: Kompan. *Plumbing*: Endot, Josam, Wheatland. *Roofing*: Owens Corning. *Science furniture*: Childcraft, Collegedale. *Signage*: 2/90. *Washroom accessories*: Gamco. *Washroom fixtures*: American Standard, Elkay, Zurn. *Waste receptacles*: Bobrick, Rubbermaid. *Windows*: YKK.

San Jose State University, Campus Village.. p. 198
Carpet: Blue Ridge, Collins & Aikman, Interface, Karastan. *Clocks/Time management*: Campbellsville Industries, Electric Time, Verden. *Communications systems*: Avaya, Belden Corning, Digicon, Systimax. *Computers*: IBM. *Door hardware, Doors*: Algoma, Eggers, Marshfield, Oshkosh. *Draperies/Blinds*: Draper, Hunter Douglas, MechoShade. *Drinking fountains*: Elkay, Halsey Taylor. *Elevators*: Fujitec, KONE, Otis, Schindler, ThyssenKrupp. *Emergency lighting*: Duralite, Emergi-Lite, Lithonia, Prescolite. *Flooring*: Armstrong, Dal-Tile. *HVAC control devices*: Carrier, Greenheck, Pace, Twin City. *HVAC units*: Armstrong, BAC, Bell & Gossett, McQuay, Patterson-Kelley, Superior Rex, Taco, Trane, Williams, Yula. *IAQ devices*: Bayley, Cook, Flakt, Penn, Woods. *Indoor lighting*: Canlet, Columbia, Day-Brite, Kenall, Kurt Versen, Lightolier, Metalux, Omega, Prescolite, Prudential, Visa. *Insulation*: Dow, Fibrex, Owens Corning, Tenneco, USG. *Kitchen equipment*: Amana, G.E., Hotpoint, Kitchen Aid, Maytag. *Laundry equipment*: GE, Hotpoint. *Library/media center furniture*: AGI, Campbell, Taylor, Tella, Trend. *Lockers*: List Industries, Lyon, Penco, Republic Storage. *Lounge furniture*: Campbell, Carolina, Lowenstein. *Movable partitions/walls*: Acorn Wire. *Office furniture*: Battrud, Carolina, Lowenstein, Patrician, PI, Prismatique. *Paint*: Benjamin Moore, Duron, Kelly Moore, Porter, Sherwin-Williams. *Physical-education flooring*: Eco Surfaces, Roppe. *Plumbing*: Josam, JR Smith, Sloan, Toto, Zurn. *Residence hall furniture*: Brookline, KI, NE Wood, Pacific Coast, Shafer. *Roofing*: AEP-SPAN, Seaman. *Science furniture*: Howe, KI. *Washroom accessories*: A&J Washroom, ASI, Bobrick, Bradley. *Washroom fixtures*: American Standard, Crane, Eljer, Kohler. *Washroom/shower partitions*: Accurate Partitions, Bobrick, Comtec. *Windows*: EFCO, Kawneer, Traco, Vistawall, Wausau, YKK. *Wire management*: B-Line, Square D.

NK Architects

95 Washington St.
Morristown, NJ 07960
973-539-5353

Rutgers University, Life Sciences Center .... p. 200-201
Brick/Masonry: Anchor Block, Clayton Block, Paul Bros. *Carpet*: Mohawk Commercial. *Ceilings*: Ecophon, USG. *Ceramic tile*: Casa Dolce Casa. *Chalkboards*: Claridge. *Clocks/Time management*: SimplexGrinnell. *Door hardware*: Glynn-Johnson, Hager, LCN, Von Duprin, Yale. *Doors*: Mohawk. *Draperies/Blinds*: Draper. *Drinking fountains*: Sunroc. *Elevators*: Zip Systems. *Emergency lighting*: Day-Brite, Elliptipar, Ledalite, Omega. *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Mannington. *HVAC control devices*: Honeywell. *HVAC units*: Trane. *Indoor lighting*: Day-Brite, Elliptipar, Ledalite, Omega. *Insulation*: Johns Manville. *Lockers*: Penco. *Markerboards*: Claridge. *Paint*: Sherwin-Williams. *Plumbing*: Kohler, Zurn. *Roofing*: Siplast. *Science furniture*: Fisher Hamilton, Watersaver. *Washroom accessories*: Gamco. *Washroom fixtures*: Kohler. *Washroom/shower partitions*: Flush Metal Partitions. *Windows*: Kawneer.

Noelker and Hull Associates, Inc.

30 W. King St.
Chambersburg, PA 17201
717-263-8464

Marietta College, Master Plan .... p. 323
No supplier information available.

NTD Architecture

955 Overland Court, Suite 100
San Dimas, CA 91773
909-450-2180

Chaffey College, Physical Education Facility ....p. 314
No supplier information available.

College of Sequoias, Tulare Center for Agriculture and Technology, Phase 1 .... p. 315
No supplier information available.

Brick/Masonry: ROX-Pro. *Carpet*: Shaw. *Ceilings*: Johns Manville. *Ceramic tile*: Crossville. *Door hardware*: Adams Rite, Dorma, Trimco. *Doors*: Curries, Horton Automatics. *Draperies/Blinds*: C/S Group. *Flooring*: Marmoleum. *Insulation*: Johns Manville. *Library/media center furniture*: Kingsley. *Movable partitions/walls*: Fabritrar. *Other*: Balco, Nevamar, Wilsonart. *Paint*: Benjamin Moore. *Roofing*: Genflex. *Security systems*: Checkpoint. *Washroom accessories*: American Specialties. *Washroom/shower partitions*: Global Partitions. *Windows*: Storefront, Vistawall.

Brick/Masonry: Angelus Block. *Card systems*: ASSA Abloy. *Carpet*: Shaw. *Ceilings*: Celotex. *Ceramic tile*: Dal-Tile. *Door hardware*: Sargent. *Doors*: Graham Wood Doors. *Drinking fountains*: Haws. *Elevators*: ThyssenKrupp. *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Armstrong. *HVAC control devices*: Nova. *HVAC units*: York. *Indoor lighting*: Day-Brite. *Insulation*: Certainteed. *Locks*: Sargent. *Markerboards*: Polyvision. *Paint*: Sherwin-Williams. *Signage*: Kendall. *Washroom accessories*: Bradley. *Washroom fixtures*: Bradley, Kohler. *Windows*: Kawneer. *Wire management*: Wiremold.

NTD Architecture

2800 N. 44th St., Suite 500
Phoenix, AZ 85008
602-956-8844

Brick/Masonry: Yavapai Block Co. *Cabinets*: Wilsonart. *Carpet*: Lees. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Door hardware*: Mayflower, Schlage, Trimco. *Doors*: Marshfield. *Fire/life-safety systems*: Victaulic. *Flooring*: Mannington. *HVAC units*: Trane. *Indoor lighting*: Columbia Lighting. *Insulation*: Owens Corning, Senergy. *Locks*: Schlage. *Paint*: Sherwin-Williams. *Roofing*: Firestone, Johns Manville. *Washroom/shower partitions*: Metpar.

Athletic equipment: Bolco, Duranet. *Bleachers/Grandstands*: Hussey Seating. *Brick/Masonry*: Superlite. *Carpet*: Lees. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Door hardware*: Corbin Russwin, Norton, Pemko. *Doors*: Eggers. *Elevators*: Otis. *Fire/life-safety systems*: JL Industries. *Flooring*: Armstrong. *Hand-drying equipment*: World Dryer. *HVAC units*: McQuay. *Lockers*: Art Metal Products. *Markerboards*: Newline. *Paint*: ICI. *Physical-education flooring*: Robbins Sports Surfaces. *Signage*: Signsource. *Washroom accessories*: American Specialties. *Washroom fixtures*: Bradley. *Washroom/shower partitions*: Capital Partitions, Comtec.

O'Connell Robertson

811 Barton Springs Road, Suite 900
Austin, TX 78704
512-478-7286

Cabinets: Wilsonart. *Carpet*: Patcraft. *Draperies/Blinds*: Levelor. *Elevators*: ThyssenKrupp. *Flooring*: Armstrong, Azrock, Dal-Tile. *Insulation*: Young & Pratt. *Other*: Conwed. *Paint*: Sherwin-Williams. *Washroom/shower partitions*: Santana.

Ohlson Lavoie Collaborative (OLC)

1515 Wazee St., Suite 400
Denver, CO 80202
303-294-9244

Athletic equipment: Balazs, Becker Arena Products, Draper. *Cabinets*: TMI Systems. *Card systems*: Synergistics. *Carpet*: Roppe, Shaw, Van Dijk Carpet. *Ceilings*: Celotex, Tectum. *Ceramic tile*: Dal-Tile. *Communications systems*: Lowell. *Door hardware*: Best Access Systems, Curries, Door Controls Intl., Glynn-Johnson, Ives, Kiawatha, LCN, McKinney, Reese, Sealeze, Von Duprin, VT Industries. *Doors*: Cookson, VT Industries, Curries. *Draperies/Blinds*: Draper, Imperial. *Drinking fountains*: Elkay. *Elevators*: Otis. *Emergency lighting*: Dual Lite. *Fire/life-safety systems*: Larsen's, SimplexGrinnell, Tyco Fire & Security. *Flooring*: Tarkett. *Hand-drying equipment*: World Dryer. *HVAC control devices*: Trane. *HVAC units*: Trane, Watts. *IAQ devices*: Trane. *Indoor lighting*: Alera, Alkco, Columbia Lighting, Dual Lite, Holophane, Hubbell, ILIGHT Technologies, Insight, Lutron, Prescolite, Progress Lighting, Vista Lighting. *Insulation*: CertainTeed. *Laundry equipment*: UniMac. *Lockers*: Republic Storage Systems, Wisconsin Bench. *Locks*: Best Access Systems. *Other*: Cummins. *Paint*: Sherwin-Williams. *Physical-education flooring*: Aacer Flooring, Action Floor Systems, Amorin, Safe-Turf. *Roofing*: Berridge, Versico. *Scoreboards/Clocks*: Daktronics. *Security systems*: Hubbell, Synergistics. *Skylights*: Kalwall. *Washroom accessories*: Bradley. *Washroom fixtures*: Delta, Elkay, Kohler, Sloan. *Washroom/shower partitions*: General Partitions, Sanymetal. *Windows*: Northland, U.S. Aluminum, Viracon.

ADA/compliance equipment: MS Sedco. *Athletic equipment*: AALCO. *Brick/Masonry*: Sioux City Brick, Strata. *Cabinets*: JMJ Caseworks. *Carpet*: Atlas, Interface, Lees. *Ceilings*: Celotex, Chicago Metallic, Hunter Douglas, Tectum. *Ceramic tile*: American Olean, Crossville. *Communications systems*: Lowell. *Door hardware*: Best Access Systems, Glynn-Johnson, Ives, LCN, National Guard Products, Stanley, Von Duprin. *Doors*: Cornell, Curries, VT Industries. *Draperies/Blinds*: Imperial, Levelor. *Drinking fountains*: Elkay. *Elevators*: ThyssenKrupp. *Emergency lighting*: Lithonia Lighting. *Fire/life-safety systems*: Central Sprinkler Co., Larsen's, Potter, Siemens Building Technologies, Tyco Fire & Security. *Flooring*: Anderson Ladd, Armstrong, Johnsonite, Lonseal. *Hand-drying equipment*: World Dryer. *HVAC control devices*: Johnson Controls, Trane. *HVAC units*: Rittling, Trane. *IAQ devices*: RenewAire, Trane. *Indoor lighting*: FC Lighting, Gotham, Holophane, Lithonia Lighting, Winona Lighting, Y Lighting. *Insulation*: Owens Corning. *Lockers*: Hollman. *Paint*: Pittsburgh Paints, PPG. *Physical-education flooring*: Mondo. *Roofing*: GenFlex Roofing. *Skylights*: Auburn Skylights, Major Industries. *Washroom accessories*: Bradley. *Washroom fixtures*: Delta, Kohler, Sloan. *Washroom/shower partitions*: Accurate Partitions. *Windows*: Oldcastle Glass. *Wire management*: Panduit.

Athletic equipment: Draper. *Brick/Masonry*: Wire-Bond. *Cabinets*: Grand Valley Wood Products. *Cafeteria furniture*: Knoll. *Carpet*: Mannington. *Ceilings*: USG. *Ceramic tile*: Dal-Tile. *Chalkboards*: Claridge. *Childcare furniture*: iToy Boxes, KI, People Friendly Places. *Classroom furniture*: KI. *Clocks/Time management*: Atomic Clocks. *Computer furniture*: KI. *Doors*: Algoma Hardwoods. *Draperies/Blinds*: MechoShade. *Drinking fountains*: Elkay. *Elevators*: Otis. *Emergency lighting*: Lithonia. *Fire/life-safety systems*: G.E., SimplexGrinnell. *Flooring*: Dur-A-Flex, Johnsonite, Marmoleum. *Hand-drying equipment*: American Specialty. *HVAC control devices*: Eaton. *HVAC units*:

Bell & Gossett. *Indoor lighting*: Artimide Lighting, Finelite, Lithonia Lighting, Shaper Lighting, SpecLight. *Insulation*: The Foam Company. *Laundry equipment*: UniMac. *Locks*: Adams Rite. *Lounge furniture*: Prismatique, Steelcase, Tuohy. *Movable partitions/walls*: Kwik-Wall. *Multipurpose areas furniture*: Haworth, Landscape Forms. *Office furniture*: Knoll. *Other*: CardioVision, Saunatech. *Paint*: Benjamin Moore. *Physical-education flooring*: Robbins Sports Surfaces. *Plumbing*: American Standard, Powers. *Roofing*: Carlisle SynTec. *Scoreboards/Clocks*: Daktronics. *Security systems*: G.E. *Signage*: Take Form. *Skylights*: Naturalite. *Washroom accessories*: Bobrick, Delta. *Washroom fixtures*: American Standard. *Waste receptacles*: Landscape Forms. *Windows*: Thompson.

Olson Lewis Dioli & Doktor Architects & Planners, Inc.

17 Elm St.
Manchester, MA 01944
978-526-4386

Charles River School, Activity Center.. p. 247
ADA/compliance equipment: Praxis. *Athletic equipment*: Bison, Draper, Nevco. *Cabinets*: Wilsonart. *Carpet*: Lees, Mohawk. *Ceilings*: Armstrong. *Ceramic tile*: American Olean, Dal-Tile. *Door hardware*: Schlage, Von Duprin. *Doors*: VT Industries. *Drinking fountains*: Halsey Taylor. *Elevators*: Delta Beckwith. *Emergency lighting*: Lithonia . *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Johnsonite. *HVAC control devices*: Viking. *HVAC units*: Trane. *Indoor lighting*: Lithonia. *Insulation*: Certainteed, Dow. *Kitchen equipment*: Halton, Kolpak. *Lockers*: Lyon. *Other*: Forbo. *Paint*: Benjamin Moore. *Physical-education flooring*: Robbins Sports Surfaces. *Plumbing*: Toto. *Roofing*: Elk, Firestone. *Washroom accessories*: Bobrick. *Washroom fixtures*: Toto. *Washroom/shower partitions*: AAMCO. *Windows*: Marvin.

OWP/P

111 W. Washington, Suite 2100
Chicago, IL 60602
312-960-8054

Chicagoland Jewish High School p. 120
ADA/compliance equipment: Kone. *Athletic equipment, Bleachers/Grandstands*: Porter Athletic. *Cabinets*: Fisher Hamilton, TMI. *Card systems*: FE Moran. *Carpet*: Interface. *Ceilings*: Armstrong, CaPaul, Chicago Metallic, Tectum. *Ceramic tile*: Crossville. *Classroom furniture*: KI. *Clocks/Time management, Communications systems*: SimplexGrinnell. *Computer furniture*: Comfortek Seating. *Door hardware*: Dorma, Von Duprin. *Doors*: Algoma Hardwoods. *Draperies/Blinds*: Bali, Draper. *Drinking fountains*: Elkay. *Elevators*: Kone. *Fire/life-safety systems*: Tyco. *Flooring*: Crossville, Mannington, Mondo. *HVAC control devices*: Precision. *HVAC units*: Carrier. *Indoor lighting*: Axis, Bega, Columbia Lighting, Holophane, Kenall, Kramer, Prescolite, Ramsbusch, Schmitz. *Insulation*: Cavitymate, CertainTeed. *Library/media center furniture*: Agati. *Lockers*: Penco. *Locks*: Dorma, Von Duprin. *Lounge furniture*: Integra Seating. *Markerboards*: Claridge. *Office furniture*: Artopex Furniture, HON. *Paint*: Sherwin-Williams. *Physical-education flooring*: Robbins. *Plumbing*: American Standard. *Roofing*: Soprema. *Science furniture*: BioFit, Virco. *Security systems*: FE Moran. *Signage*: ACS Sign Systems. *Skylights*: Wasco. *Washroom accessories*: American Specialties. *Washroom fixtures*: American Standard. *Washroom/shower partitions*: Comtec. *Windows*: Oldcastle.

Parkhill, Smith & Cooper, Inc.

4222 85th St.
Lubbock, TX 79423
806-473-3572

Snyder Elementary School .... p. 59
Athletic equipment: Performance Sports Systems. *Bleachers/Grandstands*: Irwin Seating. *Brick/Masonry*: Acme Brick, Featherlite. *Cabinets*: Terrill. *Carpet*: J&J Commercial. *Ceilings*: Armstrong. *Ceramic tile*: American Olean. *Communications systems*: Ortronics. *Door hardware*: Sargent. *Doors*: Marshfield. *Draperies/Blinds*: Hunter Douglas. *Drinking fountains*: Carrier. *Emergency lighting*: Cooper Lighting. *Fire/life-safety systems*: Honeywell. *Flooring*: Armstrong. *Hand-drying equipment*: Bradley. *HVAC control devices*: Johnson Controls. *HVAC units*: Trane. *Indoor lighting*: Cooper Lighting. *Insulation*: Owens Corning. *Kitchen equipment*: Mars. *Lockers*: Republic. *Markerboards*: Newline. *Movable partitions/walls*: Moderco. *Paint*: Sherwin-Williams. *Physical-education Flooring*: DynaSport. *Plumbing*: Nibco. *Roofing*: GAF. *Science furniture*: Scholar Carpet. *Scoreboards/Clocks*: Nevco. *Security systems*: Napco. *Signage*: Takeform. *Skylights*: Mason Industries. *Washroom accessories*: Bradley. *Washroom fixtures*: Kohler. *Washroom/shower partitions*: Comtec. *Windows*: Oldcastle Glass.

PBK

11 Greenway Plaza, 22nd Floor
Houston, TX 77046
713-965-0608

The Richard E. Berry Educational Support Center and Athletic Stadium.. p. 252
Athletic equipment: Academic Specialties, Sports Imports. *Bleachers/Grandstands*: Interkal, Sturdi Steel. *Door hardware, Doors*: Door Pro. *Scoreboards/Clocks*: Daktronics. *Skylights*: Skywall.

PBK

14001 N. Dallas Parkway, Suite 400
Dallas, TX 75420
972-233-1323

Sarah & Troy LaGrone Advanced Technology Complex.................... p. 253
Brick/Masonry: Acme Brick. *Carpet*: Collins & Aikman. *Ceramic tile*: Armstrong. *Chalkboards*: Polyvision. *Clocks/Time management*: Dukane. *Communications systems*: Dukane. *Door hardware*: Glynn Johnson, LCN Closers, McKinney, National Guard, Rockwood, Sargent, Schlage, Von Duprin. *Draperies/Blinds*: Bali. *Elevators*: ThyssenKrupp. *Insulation*: Guardian. *Movable partitions/walls*: Holcomb & Hoke. *Kitchen equipment*: Eagle Group, G.E, Hubbell, Traulsen. *Laundry equipment*: G.E. *Lockers*: Lyon. *Paint*: Sherwin-Williams. *Washroom/shower partitions*: Global Partitions. *Windows*: Vistawall.

PCH Architects, LLP

30 S. Center St.
Redlands, CA 92373
909-792-7397

Snowline Joint Unified School District, Central Services Complex ....p. 316
No supplier information available.

Perry Dean Rogers | Partners Architects

177 Milk St.
Boston, MA 02109
617-423-0100

***Norwich University, Wise Campus Center.. p. 18-19**
Brick/Masonry: Vermont Brick. *Cafeteria furniture*: Emeco, Neudorfer, Thompson Contract. *Carpet*: Interface. *Ceilings*: Armstrong. *Ceramic tile*: American Olean,

Casal Grande Padana. *Classroom furniture*: Specialty Supply, Steelcase. *Clocks/Time management*: Chicago Lighthouse. *Door hardware*: Stanley. *Doors*: Kadcor, Kawneer. *Draperies/Blinds*: Nysan. *Drinking fountains*: Elkay. *Elevators*: Otis. *Flooring*: Armstrong. *Hand-drying equipment*: Xcelerator. *Indoor lighting*: Bartco, Bega, Edison Price, Lightolier, Louis Poulsen, Selux. *Insulation*: Dow Chemical. *Lockers*: Penco Products. *Locks*: Sargent. *Lounge furniture*: Neinkampe. *Office furniture*: HON, Steelcase, Stylex. *Paint*: ICI Paints. *Roofing*: Sarnafil. *Signage*: ASI Modulex. *Washroom accessories*: Bobrick. *Washroom/shower partitions*: Sanatec. *Waste receptacles*: Peter Pepper. *Windows*: Kawneer.

University of Arkansas, J.B. Hunt Transport Services Center for Academic Excellence .... p. 204-205
Auditorium/assembly furniture: Haworth, KI. *Brick/Masonry*: Glen Gery. *Carpet*: Lees. *Ceilings*: Armstrong, Rulon. *Ceramic tile*: American Olean, Crossville. *Classroom furniture*: Haworth, Knoll, Steelcase. *Door hardware*: Stanley. *Doors*: Amweld, Kawneer. *Draperies/Blinds*: Draper. *Drinking fountains*: Elkay. *Elevators*: Otis. *Flooring*: Armstrong, Tate Access Flooring. *Insulation*: Dow, Firestone. *Locks*: Corbin Russwin. *Lounge furniture*: Brayton, Haworth. *Movable partitions/walls*: Inscape, Modernfold. *Paint*: Sherwin-Williams. *Roofing*: Bitumen Technologies. *Skylights*: Kawneer. *Washroom accessories*: Bobrick. *Washroom/shower partitions*: Sanymetal. *Windows*: Kawneer.

Peter Gisolfi Associates Architects • Landscape Architects • Interior Architects

566 Warburton Ave.
Hastings-on-Hudson, NY 10706
914-478-3677

Manhattanville College, Student Center .... p. 203
ADA/compliance equipment: Stanley. *Auditorium/assembly furniture, Bleachers/Grandstands*: Irwin Seating. *Brick/Masonry*: Ochs Brick. *Carpet*: Lees. *Ceilings*: Hunter Douglas. *Ceramic tile*: Crossville. *Classroom furniture*: Teknion. *Door hardware*: Rockwood, Von Duprin. *Doors*: Acme. *Draperies/Blinds*: Soleil. *Drinking fountains*: Filtrine. *Elevators*: Kone. *Insulation*: Dow Corning. *Lockers*: Comtec. *Locks*: Corbin Russwin. *Lounge furniture*: Krug. *Movable partitions/walls*: Moderco. *Office furniture*: Teknion. *Other*: Decoustics, Kinetics Noise Control. *Paint*: Benjamin Moore. *Physical-education flooring*: Action Floor Systems, Eco-Surfaces. *Roofing*: Fabral. *Security systems*: Securitech. *Washroom accessories*: A&J Washroom Accessories. *Washroom fixtures*: American Standard, Crane, Sloan. *Washroom/shower partitions*: Santana. *Windows*: Kawneer.

Phillips Metsch Sweeney Moore Architects

1004 E. Main St.
Santa Maria, CA 03454
805-925-2421

Arroyo Grande High School, Campuswide Reconstruction ...... p. 288
No supplier information available.

Pressley Associates, Landscape Architects

432 Columbia St.
Cambridge, MA 02141
617-491-5300

Northeastern University, Veterans Memorial .... p. 325
Brick: Stiles & Hart. *Lighting & Accessories*: Bega, MP Lighting. *Paving*: Hanover Architectural Products. *Stone*: Fletcher Granite Corp.

Randall Scott Architects, Inc.

14755 Preston Road, Suite 730
Dallas, TX 75254
972-664-9100

Tarleton State University (Texas A&M System), Recreational Sports Facility .... p. 254
Athletic equipment: LifeFitness, Porter. *Brick/Masonry*: Acme Brick. *Ceramic tile*: Dal-Tile. *Door hardware*: Sargent. *Elevators*: ThyssenKrupp. *Fire/life-safety systems*: Notifier. *Lockers*: Lyon. *Office furniture*: Steelcase. *Physical-education flooring*: Action, Mondo. *Roofing*: Sarnafil. *Scoreboards/Clocks*: Sportable. *Washroom accessories*: Bobrick. *Windows*: Kawneer.

Tyler Junior College, Ornelas Residence Hall .... p. 317
No supplier information available.

RB+B Architects, Inc./ H-F Architects, LLC

315 E. Mountain Ave., Suite 100
Fort Collins, CO 80524
970-484-0117

Douglas County School District, New Elementary School Prototype....... p. 60
ADA/compliance equipment: LCN. *Athletic equipment*: ADP Lemco. *Brick/Masonry*: Best Block. *Cabinets*: Sidney Millwork. *Carpet*: Collins & Aikman. *Ceilings*: Celotex. *Clocks/Time management*: Primex. *Communications systems*: Beacon. *Computer furniture*: Sidney Millwork. *Door hardware*: Best, LCN, Precision, Ryobi, Stanley. *Doors*: Architectural Wood Doors, VT Industries. *Draperies/Blinds*: Draper. *Drinking fountains*: Elkay. *Elevators*: Kone. *Emergency lighting*: Exitronix. *Fire/life-safety systems*: Gemini, Notifier, SimplexGrinnell. *Flooring*: Dur-A-Flex. *HVAC control devices*: Setpoint Systems. *HVAC units*: Aerco, Trane. *IAQ devices*: Greenheck, Titus. *Indoor lighting*: Delray, Finelite. *Insulation*: Dow. *Kitchen equipment*: Brass Smith, Fischer, Jackson, W. West. *Laundry equipment*: Kenmore. *Lockers*: Penco. *Locks*: Best. *Markerboards*: Polyvision. *Movable partitions/walls*: Hufcor. *Office furniture*: Sidney Millwork. *Other*: Kalwall. *Paint*: Kwal. *Physical-education flooring*: Collins & Aikman. *Playground equipment*: Churchich Recreation. *Plumbing*: Chicago Faucets, Crane, Sloan, Zurn. *Roofing*: Firestone. *Signage*: Division Ten. *Skylights*: Solatube. *Washroom fixtures*: Crane, Ferguson, Sloan, T&S Brass. *Washroom/shower partitions*: All American Metal. *Windows*: Guardian. *Wire management*: Wiremold.

RBS Design Group, PSC

1035 Frederica St., Suite 140
Owensboro, KY 42301
270-683-1158

Trojan Academy............................ p. 255
Bleachers/Grandstands: Interkal. *Brick/Masonry*: Cemex, Cherokee Brick, Dur-O-Wall, Lee Brick & Block. *Cabinets*: Polyvision. *Carpet*: Lees. *Ceilings*: Tectum. *Ceramic tile*: Dal-Tile. *Clocks/Time management*: Telcore. *Communications systems*: Iwatsu, Telcor. *Door hardware*: Dorma, Precision Hardware, Stanley. *Doors*: Kawneer, Marshfield, Steelcraft. *Drinking fountains*: American Specialties. *Emergency lighting*: Lithonia. *Fire/life-safety systems*: Notifier. *Flooring*: Armstrong. *Hand-drying equipment*: American Specialties. *HVAC units*: AAON, Daikin. *Indoor lighting*: Lithonia. *Insulation*: Johns Manville, Owens

Corning. *Kitchen equipment*: Cleveland Range, Colorpoint, Frymaster, Hobart, In-Sink-Erator, Traulsen, Vulcan Hart. *Lockers*: Republic Storage. *Locks*: Stanley. *Movable partitions/walls*: Hufcor. *Paint*: ICI Devoe. *Physical-education flooring*: Taraflex Sports Flooring. *Plumbing*: A.O. Smith. *Roofing*: Johns Manville. *Science furniture*: Leonard Preston. *Security systems*: Bosch. *Signage*: ASI Modulex. *Washroom accessories*: American Specialties. *Washroom fixtures*: Bradley, Elkay, Zurn. *Washroom/shower partitions*: Capitol Partitions, Comtec, Santana. *Windows*: Winco. *Wire management*: Mono-Systems.

RGB Design Studios

50 Holden St.
Providence, RI 02908
401-272-1730

Rhode Island College, New Residence Hall .... p. 206
Brick/Masonry: Glen-Gery. *Carpet*: Lees. *Ceilings*: Armstrong. *Ceramic tile*: American Olean. *Door hardware*: Sargent. *Doors*: Ceco, Graham. *Elevators*: Kone. *Emergency lighting*: Lightolier. *Flooring*: Duraflex. *HVAC control devices*: Wayland. *HVAC units*: AAON. *Indoor lighting*: Lithonia, Zumtobel. *Insulation*: Foamular. *Kitchen equipment*: G.E. *Laundry equipment*: Speed Queen. *Lounge furniture*: Blockhouse. *Markerboards*: Claridge. *Multipurpose areas furniture*, *Office furniture*: KI. *Paint*: Polomyx, Pratt & Lambert. *Plumbing*: American Standard. *Residence hall furniture*: Blockhouse. *Washroom accessories*: Bradley. *Windows*: Wausau.

Rhinebeck Architecture & Planning PC

21 E. Market St.
Rhinebeck, NY 12572
845-876-2832

Henry Johnson Charter School ..... p. 61
Athletic equipment: Porter. *Bleachers/Grandstands*: Interkal. *Brick/Masonry*: Redland Brick. *Cabinets*: Case Systems. *Carpet*: Mohawk. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Chalkboards*: Aarco Products. *Door hardware*: LCN, Schlage, Von Duprin. *Doors*: Marshfield. *Elevators*: Concord. *Emergency lighting*: Lithonia Lighting. *Fire/life-safety systems*: Fire Systems Inc. *Flooring*: Armstrong. *Hand-drying equipment*: American Specialties. *HVAC control devices, units, IAQ devices*: Carrier. *Indoor lighting*: Lithonia Lighting. *Insulation*: Dow, Johns Manville. *Locks*: Schlage. *Markerboards*: Aarco Products. *Other*: Kawneer, Pecora, Tectum. *Physical-education flooring*: Action Floor Systems. *Plumbing*: Eljer. *Roofing*: Johns Manville. *Signage*: Mohawk Sign Systems. *Washroom accessories*: American Specialties. *Washroom fixtures*: Eljer, Sloan. *Washroom/shower partitions*: Flushmetal Partitions. *Windows*: Window Tech.

Rhodes+Brito Architects

601 N. Magnolia Ave., Suite 100
Orlando, FL 32801
407-648-7288

Shenandoah Elementary School, Renovation and Additions............. p. 62
No supplier information available.

Stonewall Jackson Middle School, Renovation and Addition .... p. 86
No supplier information available.

Robbins Jorgensen Christopher Architects (RJC)

320 Laurel St.
San Diego, CA 92101
619-239-9292

University of California—Irvine, Anteater Recreational Center (ARC) Expansion.............................. p. 208-209
Carpet: Shaw. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile, Mapei. *Door hardware*: GabbaRoad *Drinking fountains*: Zurn. *Emergency lighting*: Merit. *Fire/life-safety systems*: Siemens. *Flooring*: Mondo. *Hand-drying equipment*: Bobrick. *HVAC control devices*: Johnson Controls. *HVAC units*: Huntair. *Indoor lighting*: Lightolier, Sylvania. *Insulation*: Johns Manville. *Kitchen equipment*: Josam, Wolf. *Lockers*: Titan. *Locks*: Schlage. *Movable partitions/walls*: USG. *Plumbing*: Zurn. *Washroom accessories*: Bobrick. *Washroom fixtures*: Zurn. *Windows*: Kawneer.

Rossetti

999 N. Sepulveda Blvd., Suite 100
El Segundo, CA 90245
310-416-9660

University of California—Irvine, Student Center Phase 4......... p. 289-291
ADA/compliance equipment: Garaventa, Horton Door. *Brick/Masonry*: G.E., Muddox. *Cabinets*: Pacific Architectural Millwork. *Cafeteria furniture*: Nevamar. *Carpet*: Bigelow, Mohawk. *Ceilings*: Armstrong, USG. *Ceramic tile*: Dal-Tile. *Door hardware*: Adams-Rite, Best, Ives, LCN, Pemco, Von Duprin. *Doors*: Security Metal Products. *Elevators*: Kone. *Fire/life-safety systems*: SimplexGrinnell, Tyco. *Flooring*: Forbo. *HVAC control devices*: Siemens. *HVAC units*: Energy Lab. *IAQ devices*: Siemens. *Locks*: Schlage. *Movable partitions/walls*: Hufcor. *Paint*: Dunn Edwards. *Signage*: Daktronics, Vomar. *Washroom accessories*, *Washroom/shower partitions*, *Waste receptacles*: Bobrick. *Windows*: Arcadia, PPG.

RossTarrant Architects, Inc.

101 Old Lafayette Ave.
Lexington, KY 40502
859-254-4018

Owensboro Community & Technical College, Advanced Technology Center .... p. 207
ADA/compliance equipment: Stanley. *Brick/Masonry*: Boral Brick, Midwest Cast Stone, Miller Block, Trendstone, Weck Glass Block. *Carpet*: Patcraft. *Ceilings*: Armstrong, USG. *Ceramic tile*: Crossville, Dal-Tile. *Chalkboards*: Newline. *Classroom furniture*: Chromecraft, Sit On It. *Clocks/Time management*: Primex. *Door hardware*: Best, Ceco Door Products, Don-Jo, Pranko, Rixson. *Doors*: Graham, Cookson, Essex. *Draperies/Blinds*: Hunter Douglas, Lutron. *Drinking fountains*: Halsey Taylor. *Elevators*: ThyssenKrupp. *Emergency lighting*: Lithonia. *Fire/life-safety systems*: Armor, Hilti, Larsen's, Siemens. *Flooring*: Armstrong. *HVAC control devices*: Honeywell, Tridium. *HVAC units*: McQuay. *Indoor lighting*: Litecontrol, Lithonia. *Insulation*: Dow, Hilti, Johns Manville. *Lockers*: Republic. *Locks*: Best. *Lounge furniture*: First Office. *Markerboards*: Newline. *Movable partitions/walls*: FolDoor. *Paint*: Porter Paints, Zolatone. *Plumbing*: Brass Craft, Crestline, Dearborn Brass. *Roofing*: Color Guard, Grace, McElroy, Siplast. *Signage*: ASI Modulex. *Washroom accessories*: American Specialties. *Washroom fixtures*: Bradley, Eclipse Stainless, Kohler, Zurn. *Washroom/shower partitions*: Accurate Partitions. *Windows*: Arch Aluminum Glass, Storefront General Glass. *Wire management*: Cablofil, Cloud, Panduit.

Western Kentucky University, Florence Schneider Hall, Renovation and Addition.. p. 291
Cabinets: Lyndon Millwork. *Carpet*: Patcraft, Shaw. *Ceilings*: Celotex. *Ceramic tile*: Dal-Tile. *Chalkboards*: Claridge. *Door hardware*: Best Access Systems, Hager, Metal Products Inc. *Doors*: Osh Kosh.

Draperies/Blinds: Hunter Douglas, Phifer. *Drinking fountains*: Elkay. *Fire/life-safety systems*: SimplexGrinnell, Viking. *Flooring*: Armstrong, Johnsonite. *HVAC control devices*: Danfoss Graham. *HVAC units*: Price, Thermacor Process, Trane. *Indoor lighting*: Davis-Muller, Evergreen, Lithonia, Luminaire. *Insulation*: Knauf, Thermafiber. *Markerboards*: Claridge. *Paint*: Sherwin-Williams. *Plumbing*: Aerco, Zurn. *Residence hall furniture*: Ecologic. *Signage*: ASI Modulex. *Washroom accessories*: American Specialties. *Washroom fixtures*: American Standard, Zurn. *Washroom/shower partitions*: Comtec. *Windows*: Fen Con.

Rowland Design, Inc.

701 E. New York St.
Indianapolis, IN 46202
317-636-3980,

Indiana University, Classroom Building .... p. 256
Carpet: Shaw. *Ceilings*: USG. *Ceramic tile*: Crossville, Dal-Tile. *Chalkboards*: Polyvision. *Classroom furniture*: Biofit, Versteel. *Door hardware*: Hager, LCN, Von Duprin. *Doors*: Chapelle. *Draperies/Blinds*: Hunter Douglas. *Drinking fountains*: Oasis. *Elevators*: Schindler. *Emergency lighting*: Lithonia Lighting. *Fire/life-safety systems*: Amerex. *Flooring*: Tarkett. *HVAC control devices*: Siemens. *HVAC units*: Trane. *Indoor lighting*: Lithonia Lighting. *Insulation*: Owens Corning. *Locks*: Stanley. *Multipurpose areas furniture*: Landscape Forms. *Office furniture*: Knoll, Lowenstein. *Other*: Da-Lite. *Paint*: Sherwin-Williams. *Roofing*: Certainteed, Firestone. *Washroom accessories*: Bobrick. *Washroom fixtures*: American Standard. *Washroom/shower partitions*: Comtec. *Windows*: YKK.

Samuel J. Cichello, Architect

2714 Franklin St., P.O. Box 326
Weedsport, NY 13166
315-689-7090

Cayuga/Onondaga BOCES Regional Education Center........................... p. 257
Athletic equipment: Porter. *Brick/Masonry*: Continental Brick Co. *Carpet*: Blue Ridge Commercial Carpet. *Ceilings*: USG. *Ceramic tile*: Dal-Tile. *Chalkboards*: Claridge. *Draperies/Blinds*: Kirsch. *Clocks/Time management*, *Communications systems*: SimplexGrinnell. *Door hardware*: Best Lock, Burns, DCI, Dorma, Stanley. *Doors*: Algoma, Curries, Wayne Dalton. *Drinking fountains*: Elkay. *Elevators*: ThyssenKrupp. *Emergency lighting*: Cooper Lighting. *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Fritztile. *HVAC control devices*: Pasco. *HVAC units*: McQuay, Sterling. *IAQ devices*: Xetex. *Indoor lighting*: Holophane, Prescolite. *Insulation*: Hunter. *Kitchen, Laundry equipment*: G.E. *Lockers*: Superior. *Locks*: Best, Dorma. *Markerboards*: Claridge. *Movable partitions/walls*: Modernfold. *Paint*: Sherwin-Williams. *Physical-education flooring*: Beynon. *Playground equipment*: Landscape Structures. *Plumbing*: American Standard. *Roofing*: Carlisle. *Scoreboards/Clocks*: Daktronics. *Security systems*: Best Access. *Skylights*: Bilco. *Washroom accessories, fixtures*: Bradley. *Washroom/shower partitions*: Global Partitions. *Windows*: EFCO, Vistawall.

Saphire + Albarran Architecture LLC

12 North Main St.
Pennington, NJ 08534
609-737-5924

The Hun School, The Hun Athletic Center .... p. 121
Bleachers/Grandstands: Clarin. *Brick/Masonry*: Arriscraft. *Carpet*: Durkan. *Ceilings*: Armstrong. *Ceramic tile*: American Olean. *Door hardware*: Schlage. *Doors*: Mohawk. *Drinking fountains*: Haws. *Elevators*: Dover. *Emergency lighting*: Dual Lite. *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Azrock. *Hand-drying equipment*: World Dryer. *HVAC control devices*: Johnson Controls. *HVAC units*: Aeon. *Indoor lighting*: Lightolier. *Insulation*: Owens Corning. *Locks*: Schlage. *Paint*: Benjamin Moore. *Plumbing*: American Standard. *Roofing*: GAF. *Washroom accessories, fixtures*: Bobrick. *Washroom/shower partitions*: Comtec, Santana. *Windows*: Kawneer.

SchenkelShultz

200 E. Robinson St., Suite 300
Orlando, FL 32801
407-872-3322

Indiana University-Purdue University Fort Wayne, John and Ruth Rhinehart Music Center ....p. 210
No supplier information available.

Wekiva High School .... p. 122
No supplier information available.

Schmidt Associates

320 E. Vermont St.
Indianapolis, IN 46204
317-263-6226

Warsaw Community High School, Performing Arts Wing and Auditorium .... p. 258
Carpet: J&J. *Ceilings*: USG. *Ceramic tile*: Caesar la Grotte, Dal-Tile. *Communications systems*: Dukane. *Doors*: Cornell. *Emergency lighting*: Hubbell Lighting. *Flooring*: Mannington, Roppe. *HVAC control devices*: Trane. *HVAC units*: Evapco, Haakon, Trane. *Indoor lighting*: Hubbell Lighting. *Kitchen equipment*: Hatco, Hobart, Traulsen. *Markerboards*: Claridge. *Multipurpose areas furniture*: Landscape Forms. *Other*: Guilford. *Paint*: Tremec, Zolatone. *Physical-education flooring*: Mondo. *Washroom/shower partitions*: Global Partitions. *Windows*: Wausau. *Wire management*: Belden.

Scholer Corporation

111 West 240 South, Wea-Ton,
P.O. Box 808
Lafayette, IN 47902-0808
765-474-1478

Purdue University, Memorial Union Dining Services Renovation......... p. 293
Cafeteria furniture: Allermuir, Cape Furniture, Davis, Falcon, Furniturelab, Shelby Williams, West Coast Industries, Wood Goods Inc. *Fire/life-safety systems*: JL Industries, Reliable. *Paint*: Sherwin-Williams. *Signage*: Sign Solutions.

SCHRADERGROUP Architecture

161 Leverington Ave., Suite 105
Philadelphia, PA 19127
215-482-7440

Bucks County Community College, Upper County Campus Expansion and Renovation ....p. 318
No supplier information available.

Scott Simons Architects

75 York St.
Portland, ME 04101
207-772-4656

Tilton School, Tilton Academic Building .... p. 123
Auditorium/assembly furniture: KI. *Brick/*

Masonry: Morin. *Cabinets*: Gibralter, Wilsonart. *Carpet*: Shaw. *Ceilings*: Rulon. *Ceramic tile*: Dal-Tile. *Classroom furniture*: VS. *Clocks/Time management*: Sapling. *Communications systems*: Dukane. *Door hardware*: Corbin Russwin. *Doors*: Mohawk. *Draperies/Blinds*: Draper. *Drinking fountains*: Halsey Taylor. *Elevators*: Canton Elevator. *Emergency lighting*: Cooper Lighting. *Fire/life-safety systems*: JL Industries. *Flooring*: Dal-Tile, Forbo. *HVAC units*: Trane. *Indoor lighting*: Cooper Lighting, Elliptipar, Lite Control, Se'lux, Vantage. *Insulation*: Tridon Insulation. *Locks*: Corbin Russwin. *Markerboards*: Claridge. *Multipurpose areas furniture*, *Office furniture*: Herman Miller. *Paint*: Sherwin-Williams. *Plumbing*: Wade. *Roofing*: Pac-Clad. *Science furniture*: Kewaunee Scientific, Wilsonart. *Skylights*: Wasco. *Washroom fixtures*: Kohler. *Washroom/shower partitions*: Santana. *Waste receptacles*: Bobrick. *Windows*: EFCO.

SDS Architects, Inc.

205 N. Dewey St.
Eau Claire, WI 54703
715-832-1605

University of Wisconsin—Stevens Point, Dreyfus University Center Addition and Remodeling ....p. 211

Brick/Masonry: Belden Brick. *Ceilings*: Armstrong. *Ceramic tile*: Mannington, Wausau Tile. *Door hardware*: Hager. *Drinking fountains*: Acorn Aqua. *Elevators*: ThyssenKrupp. *Fire/life-safety systems*: Bosch, JL Industries. *HVAC control devices*: ABB Automation. *HVAC units*: McQuay. *Indoor lighting*: Cooper Lighting. *Insulation*: Owens Corning. *Kitchen equipment*: Gaylord, Kairak, Thermo-Kool. *Lockers*: Lyon. *Movable partitions/walls*: Panelfold. *Paint*: Sherwin-Williams. *Plumbing*: Ferguson. *Roofing*: Firestone. *Signage*: Metal Arts. *Washroom accessories*: Gamco. *Washroom fixtures*: Kohler. *Washroom/shower partitions*: Capitol Partitions. *Windows*: Kawneer.

SFCS Inc.

305 S. Jefferson St.
Roanoke, VA 24011
540-344-6664

Blue Ridge Community College, Fine and Performing Arts Building .... p. 259

No supplier information available.

Sherman Carter Barnhart

2405 Harrodsburg Road
Lexington, KY 40504
859-224-1351

Alvaton Elementary School .... p. 63

Brick/Masonry: Lee Brick & Block. *Cabinets*: Southern Cabinetry. *Carpet*: Shaw. *Ceilings*: Celotex. *Ceramic tile*: Dal-Tile. *Chalkboards*: Platinum. *Door hardware*: LCN, Monarch, Pemco, Schlage. *Doors*: Graham, Metal Products. *Drinking fountains*: Elkay. *Elevators*: Tradesman. *Fire/life-safety systems*: Notifier. *Flooring*: Armstrong, Dal-Tile. *HVAC control devices*: Automated Logistics. *HVAC units*: York. *Indoor lighting*: Lithonia. *Insulation*: Nudura. *Library/media center furniture*: Worden. *Paint*: Sherwin-Williams. *Physical-education flooring*: Horner. *Plumbing*: Crane. *Roofing*: Aluma Shield, Siplast. *Washroom accessories*: A&J Washroom Accessories. *Washroom fixtures*: Chicago. *Windows*: Winco.

***Richardsville Elementary School.. p. 20**

No supplier information available.

SHW Group LLP

20 E. Greenway Plaza, Suite 200
Houston, TX 77046
713-548-5734

Andy Dekaney High School......... p. 124

Athletic equipment: Porter. *Auditorium/assembly furniture*: Irwin Seating. *Bleachers/Grandstands*: Sturdisteel. *Brick/Masonry*: Alamo Stone, Stone Castle Industries. *Cabinets*: Hallmark Casework. *Carpet*: Mannington. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Clocks/Time management*: Primex Wireless. *Door hardware*: VT Industries. *Doors*: VT Industries. *Draperies/Blinds*: Bali. *Elevators*: Otis. *Emergency lighting*: Cummins Southern Plan. *Fire/life-safety systems*: Fire Safe. *Flooring*: Armstrong, Casa Dolce Casa, Dal-Tile. *Hand-drying equipment*: Jet Air. *Indoor lighting*: Lightolier. *Insulation*: Dow. *Kitchen equipment*: G.E. *Lockers*: List Industries. *Markerboards*: Best Rite. *Movable partitions/walls*: Kwik-Wall. *Paint*: PPG. *Physical-education flooring*: Aacer, Mateflex, Stonehard. *Roofing*: Berridge. *Scoreboards/Clocks*: Primex Wireless. *Security systems*: Sonitrol. *Signage*: Southwest Texas Graphics. *Washroom accessories*: A&J Washroom Accessories. *Washroom accessories*: Georgia Pacific. *Windows*: Visteon Versalux.

Carl Wunsche Sr. High School .... p. 125

Brick/Masonry: Acme *Brick*: Alamo Stone. *Cabinets*: Campbell Rhea, Global Casework. *Carpet*: Interface. *Ceilings*: Armstrong, Chicago Metallic. *Ceilings*: Dal-Tile. *Door hardware*, *Doors*: Ceco Door Products, Door Pro Systems, VT Industries. *Draperies/Blinds*: Bali. *Elevators*: ThyssenKrupp. *Fire/life-safety systems*: Edwards Systems Technology. *Flooring*: Armstrong, Dal-Tile, Johnsonite. *Hand-drying equipment*: Vista. *HVAC control devices, units*: ITT Industries. *IAQ devices*: ITT Industries. *Indoor lighting*: Lightolier. *Insulation*: Certainteed, Owens Corning. *Kitchen equipment*: Hatco. *Laundry equipment*: G.E. *Markerboards*: walltalkers. *Movable partitions/walls*: Modernfold. *Paint*: ICI. *Physical-education flooring*: Duroflex. *Playground equipment*: Grounds for Play. *Washroom accessories*: ASI, Bobrick. *Washroom fixtures*: Just Mfg., Kohler. *Washroom/shower partitions*: Capitol Partitions.

West Brazos Junior High School ... p. 89

Athletic equipment: American Athletic. *Bleachers/Grandstands*: Gym Equipment, Sheridian. *Brick/Masonry*: Acme, Featherlite. *Cabinets*: Campbell Rhea. *Carpet*: Collins & Aikman. *Ceramic tile*: American Olean, Dal-Tile. *Door hardware*: Sargent. *Draperies/Blinds*: Bali. *Fire/life-safety systems*: Tyco. *Hand-drying equipment*: Bradley. *Indoor lighting*: Litecontrol. *Insulation*: Certainteed, Owens Corning. *Kitchen equipment*: Hobart. *Laundry equipment*: Girbau. *Lockers*: List Industries. *Markerboards*: Claridge. *Movable partitions/walls*: Hufcor. *Physical-education flooring*: Mondo. *Roofing*: Morin. *Science furniture*: Campbell Rhea. *Security systems*: Bosh. *Signage*: South Texas Graphics. *Skylights*: Major Industries. *Washroom accessories*: Bradley. *Washroom/shower partitions*: Columbia Partitions. *Windows*: PPG, YKK.

SHW Group LLP

5717 Legacy Drive, Suite 200
Plano, TX 75024
214-473-2400

Emmett J. Conrad High School ... p. 126

No supplier information available.

Justin Wakeland High School...... p. 127

No supplier information available.

SHW Group LLP

300 W. Sixth St., Suite 2200
Austin, TX 78701
512-867-6090

Freiheit Elementary School .... p. 64
Athletic equipment: Porter. *Brick/Masonry*: Hanson. *Cabinets*: Terrill. *Carpet*: Lees. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Door hardware*: Stanley. *Doors*: Buell. *Draperies/Blinds*: Hunter Douglas. *Fire/life-safety systems*: Honeycutt Fire Systems. *Flooring*: Armstrong. *Hand-drying equipment*: Gulf Coast. *Insulation*: Johns Manville. *Kitchen equipment*: Kirby. *Laundry equipment*: G.E. *Library/media center furniture*: J&S Equipment. *Locks*: Schlage. *Markerboards*: Best Rite. *Paint*: Sherwin-Williams. *Plumbing*: Triad. *Roofing*: Johns Manville. *Washroom accessories, fixtures*: Gulf Coast. *Waste receptacles*: Gulf Coast. *Windows*: Bell Glass.

Tarver Elementary School .... p. 65
Athletic equipment: Porter. *Brick/Masonry*: Acme. *Cabinets*: Terrill Mfg. *Carpet*: Lees. *Ceilings*: USG. *Door hardware*: Pearland. *Doors*: Bommer, Corbin Russwin, Monarch. *Draperies/Blinds*: Bali. *Draperies/Blinds*: Graber. *Fire/life-safety systems*: Tyco. *Flooring*: Armstrong. *HVAC units*: Engineered Air. *Kitchen equipment*: Kirby. *Library/media center furniture*: Maco Mfg. *Lockers*: Superior. *Markerboards*: Best Rite. *Paint*: Sherwin-Williams. *Physical-education flooring*: Connor. *Plumbing*: Crane, Elkay, Sloan, Zurn. *Roofing*: Berridge, Johns Manville. *Science furniture*: Terrill Mfg. *Washroom accessories*: Bradley. *Washroom fixtures*: Crane, Sloan, Zurn. *Washroom/shower partitions*: Santana.

SHW Group LLP

2338 Coolidge Highway, Suite 100
Berkley, MI 48072
248-336-4700

Schoolcraft College, Biomedical Technology Center .... p. 212
Brick/Masonry: Grand Blanc Cement. *Carpet*: Milliken. *Ceilings*: Ceilings Plus, Tectum. *Ceramic tile*: American Olean, Crossville, Tau Ceramica, Wausau. *Door hardware*: Best. *Draperies/Blinds*: MechoShade. *Drinking fountains*: Halsey Taylor. *Flooring*: Mannington. *HVAC control devices*: Johnson Controls. *HVAC units*: Trane. *Indoor lighting*: Bega, Color Kinetics, Delray, Finelite, Focal Point, IO Lighting, Kirlin, Lithonia, Se'Lux. *Locks*: Best. *Paint*: Sherwin-Williams, Valspar. *Roofing*: Johns Manville. *Washroom fixtures*: Chicago Faucets, Kohler. *Windows*: Kawneer.

SHW Group LLP

11415 Isaac Newton Square
Reston, VA 20190
703-480-4020

Somerset Intermediate School....... p. 88
Athletic equipment: Draper. *Ceilings*: Armstrong. *Chalkboards*: ADP Lemco, Polyvision. *Classroom furniture*: Stevens Industries. *Communications systems*: Rauland Borg. *Draperies/Blinds*: Boli Aluminum Blinds, MechoShade. *Drinking fountains*: Oasis. *Elevators*: Columbia Elevator. *Fire/life-safety systems*: Edwards Systems Technology, Envoy, Reliable. *Flooring*: Armstrong. *HVAC control devices, units*: Mammoth, Venman. *Indoor lighting*: Finelite, Lithonia. *Kitchen equipment*: Carrier, Cleveland, Eagle Group, Garland, Traulsen. *Markerboards*: ADP Lemco, Polyvision. *Physical-education flooring*: Robbins Sports Surfaces. *Science furniture*: Leonard Peterson. *Security systems*: Vicon. *Signage*: Gemini. *Washroom accessories*: Bradley. *Washroom fixtures*: American Standard, Bradley. *Washroom/shower partitions*: Capitol Partitions, Comtec. *Windows*: U.S. Aluminum. *Wire management*: AMP, Commscope, West Penn.

Sillman Wright Architects

7515 Metropolitan Drive, Suite 400
San Diego, CA 92108
619-294-7515

Alliant International University, Walter Library and Marshall Goldsmith School of Management .... p. 213
Carpet: Collins & Aikman. *Ceilings*: Armstrong. *Door hardware*: Hager, Norton, Pemco, Schlage. *Doors*: Pacific Arch Wood Products. *Drinking fountains*: Haws. *Emergency lighting*: Iotia, McPhilben. *Flooring*: Armstrong. *HVAC control devices*: Johnson Controls. *HVAC units*: Huntair, McQuay. *Indoor lighting*: Axis, Day-Brite. *Insulation*: Johns Manville. *Paint*: Dunn Edwards. *Plumbing*: Chicago Faucets, Elkay. *Washroom accessories*: Bobrick. *Washroom fixtures*: Chicago. *Windows*: Southwest Aluminum.

Skinner Lamm & Highsmith Architects

301 Glenwood Ave., Suite 270
Raleigh, NC 27565
919-215-2248

Lynn Road Elementary School...... p.294
Athletic equipment: Draper. *Brick/Masonry*: Triangle Brick. *Cabinets*: TMI. *Card systems*: International Electronics. *Carpet*: Lees. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Chalkboards*: Polyvision. *Clocks/Time management*: Elgin. *Door hardware*: Best Access. *Doors*: Marshfield. *Draperies/Blinds*: Hunter Douglas. *Drinking fountains*: Oasis. *Emergency lighting*: Emergi-Lite. *Fire/life-safety systems*: Mircom. *Flooring*: Armstrong. *Hand-drying equipment*: Kimberly Clark. *HVAC control devices*: Honeywell. *HVAC units*: Carrier. *IAQ devices*: Ebtron. *Indoor lighting*: Day-Brite, LAM. *Insulation*: Certainteed, Dow. *Kitchen equipment*: Blodgett, Color Point, Delfield, Hobart, Low Temp, Winston. *Library/media center furniture*: Russwood. *Lockers*: Republic Storage Systems. *Locks*: Ingersoll Rand. *Markerboards*: Polyvision, Steelcase. *Other*: American Flagpole. *Paint*: ICI Paints. *Physical-education flooring*: Gerflor, Taraflex. *Playground equipment*: Kompan. *Plumbing*: American Standard, Just Mfg. *Roofing*: Englert. *Security systems*: International Electronics. *Signage*: Signage Industries. *Washroom accessories*: ASI, Kimberly Clark. *Washroom fixtures*: American Standard. *Washroom/shower partitions*: Capitol Partitions, Comtec. *Windows*: Vistawall.

Small Kane Architects, PA

3105 Glenwood Ave., Suite 100
Raleigh, NC 27615
919-833-1994

Barwell Road Elementary School and Community Center .... p. 260
No supplier information available.

Spillman Farmer Architects

One Bethlehem Plaza, Suite 1000
Bethlehem, PA 18018
610-865-2621

Elon University, The Colonnades Dining Hall..................................... p. 214
Brick/Masonry: Boren Brick. *Carpet*: Interface. *Ceilings*: Armstrong. *Ceramic tile*: American Olean. *Door hardware*: Schlage. *Draperies/Blinds*: Levelor. *Drinking fountains*: Elkay. *Elevators*: ThyssenKrupp. *Flooring*: Casa Dolce Casa. *HVAC control devices, units*: Trane. *Insulation*: Owens Corning. *Kitchen equipment*: Bi-Line, Captiveaire, Coldzone, Gaylord, Kolpak. *Paint*: Sherwin-Williams. *Roofing*: Elk. *Washroom accessories*: Bradley. *Washroom/shower partitions*: Ampco. *Windows*: Pella.

The Stacy Group

200 E. 10th St. Plaza, Suite C
Edmond, OK 73034
405-330-8292

Centennial Elementary School...... p. 66
Athletic equipment: Aalco. *Bleachers/Grandstands*: Sheridan. *Brick/Masonry*: Acme Brick, Coronado Stone, Featherlite. *Carpet*: Interface, Lees. *Ceilings*: USG. *Ceramic tile*: Dal-Tile. *Clocks/Time management*: Primex Wireless. *Door hardware*: Best. *Doors*: Oshkosh. *Draperies/Blinds*: Hunter Douglas, Industrial Louvers, JB Martin. *Drinking fountains*: Oasis. *Emergency lighting*: Dual Lite. *Flooring*: Armstrong, Dal-Tile. *HVAC units*: Trane. *Indoor lighting*: Belfer, Hubbell Lighting, Visa. *Insulation*: Owens Corning. *Markerboards*: Polyvision. *Paint*: Kelly Moore. *Physical-education flooring*: Action Floor Systems. *Playground equipment*: Surface America. *Roofing*: Berridge, Siplast. *Washroom accessories*: Bobrick, Intersan. *Washroom/shower partitions*: General Partitions. *Windows*: Kawneer.

The Stacy Group

10229 E. 96th St. N., #101
Owasso, OK 74055
918-272-2622

Collinsville Public Schools, Early Childhood Center.......................... p. 30
Cabinets: LSI. *Carpet*: Interface. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Clocks/Time management*: SimplexGrinnell. *Communications systems*: SimplexGrinnell. *Door hardware*: Schlage. *Doors*: Graham, Republic. *Drinking fountains*: Zurn. *Emergency lighting*: Hubbell Lighting. *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Azrock. *HVAC control devices*: Carrier. *HVAC units*: Carrier. *Indoor lighting*: Hubbell Lighting. *Insulation*: Johns Manville. *Locks*: Schlage. *Markerboards*: Newline. *Messageboards*: Newline. *Other*: Sound Concepts. *Paint*: Sherwin-Williams. *Plumbing*: Zurn. *Roofing*: Alliance Steel. *Security systems*: SimplexGrinnell. *Signage*: ARK Ramos. *Washroom accessories*: Bradley. *Washroom fixtures*: American Standard, Bradley, Zurn. *Washroom/shower partitions*: General Partitions. *Windows*: Vistawall.

Steffian Bradley Architects

100 Summer St., Ninth Floor
Boston, MA 02110
617-305-7100

Lasell College, Rockwell Residence Hall.. p. 215
ADA/compliance equipment: Pravis. *Brick/Masonry*: Jenkins Brick. *Card systems*: Best Lock. *Carpet*: Armstrong. *Door hardware*: Ingersoll Rand. *Doors*: Vistawall. *Draperies/Blinds*: Dutton. *Elevators*: Otis. *Emergency lighting*: Columbia. *Fire/life-safety systems*: Honeywell, Innovaia, JL Industries. *Flooring*: Excellon. *HVAC control devices*: Aaon. *HVAC units*: Aquaforce, Carrier. *Indoor lighting*: Acera, Prescolite. *Insulation*: Cafco. *Kitchen equipment*: Chicago Faucets, Elkay, Frigidaire, G.E. *Laundry equipment*: Fiat, Mac Gray. *Locks*: Adams Rite. *Markerboards*: Forbo. *Other*: Thunderbolt. *Paint*: Carlisle. *Residence hall furniture*: New England Woodcraft. *Roofing*: Carlisle. *Signage*: Sunshine Sign Co. *Washroom accessories, fixtures*: Kohler. *Washroom/shower partitions*: Kohler, Symmons. *Waste receptacles*: ASI. *Windows*: Eagle.

Studio B Architects

501 Rio Grande Place, Suite 104
Aspen, CO 81611
970-920-9428

***Aspen Middle School.............. p. 74-75**
No supplier information available.

Studio 3 Design Group, PC

1617 Walton Way
Augusta, GA 30904
706-667-9784

Medical College of Georgia, Auditoria Center Renovation........................ p. 295
Auditorium/assembly furniture: KI. *Cabinets*: Wilsonart. *Carpet*: Collins & Aikman, Tandus. *Ceilings*: USG. *Ceramic tile*: Crossville, Mohawk. *Door hardware*: Sargent. *Doors*: VT Industries. *Emergency lighting*: Lithonia Lighting. *Flooring*: Merida. *HVAC units*: Trane. *Indoor lighting*: Visa Lighting. *Lounge furniture*: Indiana Furniture. *Office furniture*: Indiana Furniture. *Paint*: Sherwin-Williams. *Skylights*: Wasco. *Washroom accessories*: Bradley. *Washroom fixtures*: Bradley, Frequency Lavatory Systems. *Windows*: Kawneer.

StruXture Architects

314 E. Fourth St.
Waterloo, IA 50703
319-234-1515

Lincoln Elementary School........... p. 67
ADA/compliance equipment: LCN. *Brick/Masonry*: Edwards Cast Stone, Sioux City Brick: United Brick and Tile. *Cabinets*: LSI, Pionite, Wilsonart. *Card systems*: Cardkey. *Carpet*: Mohawk. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Clocks/Time management*: Visiplex Technologies. *Communications systems*: Light Speed Technologies. *Computers*: Dell. *Door hardware*: LCN Closers, McKinney, Rockwood, Sargent, Trimco, Von Duprin. *Doors*: ASSA Abloy, Curries, Graham Mfg., VT Industries. *Draperies/Blinds*: KM Fabrics. *Drinking fountains*: Bradley, Elkay. *Elevators*: Kone. *Emergency lighting*: Kenall, Prescolite. *Fire/life-safety systems*: Larsen's, Notifier, Pelco. *Flooring*: Mannington. *Hand-drying equipment*: World Dryer. *HVAC control devices*: Broan, DuctSox. *HVAC units*: Trane. *Indoor lighting*: Columbia Lighting, Day-Brite Lighting, Gardco, G.E., Holophane, Hubbell Lighting, Kim Lighting, Lightmaster, Liminare, Linear, Omega, Peerless, Takistar. *Insulation*: Johns Manville, Owens Corning, Senergy. *Kitchen equipment*: Broan, In-Sink-Erator, Kemlee. *Library/media center furniture*: Brodart. *Lockers*: Republic Storage Systems. *Locks*: Schlage. *Markerboards*: Newline. *Movable partitions/walls*: Hufcor. *Office furniture*: Allsteel. *Paint*: Sherwin-Williams. *Physical-education flooring*: Aacer Flooring, Draper. *Plumbing*: Apollo, Bell & Gossett, Ecolab, Milwaukee Valve. *Roofing*: Firestone, Una-Clad. *Scoreboards/Clocks*: Fair-Play Scoreboards. *Security systems*: Aiphone. *Signage*: ASI Modulex. *Skylights*: Kalwall. *Washroom accessories*: American Specialties. *Washroom fixtures*: Bradley, Church, Delta, Kohler, Kohler, Lav Guard, Sloan, Zurn. *Washroom/shower partitions*: Comtec. *Waste receptacles*: Landscape Forms. *Windows*: Kawneer. *Wire management*: Cope, Wiremold.

StruXture Architects

1415 28th St., Suite 325
West Des Moines, IA 50266
515-283-5101

Vinton-Shellsburg High School .. p. 128
Athletic equipment: Draper. *Auditorium/assembly furniture, Bleachers/Grandstands*: Irwin Seating. *Brick/Masonry*: Edwards Cast Stone. *Carpet*: Daltonia. *Carpet*: Mannington. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Clocks/Time management*:

Visiplex Technologies. *Communications systems*: Atlas, Telecor. *Door hardware*: Glynn Johnson, Ives, LCN, Pemko, Stanley, Stanley, Von Duprin. *Doors*: Cornell, Graham Mfg., Special-Lite, Steelcraft, Tubelite. *Draperies/Blinds*: Hunter Douglas. *Drinking fountains*: Elkay. *Emergency lighting*: Signtex. *Fire/life-safety systems*: Fire Sprinkler Co., JL Industries, Notifier, Nystrom. *Flooring*: Mannington. *Hand-drying equipment*: World Dryer. *HVAC control devices*: Johnson Controls. *HVAC units*: Acme, Flexmaster, Trane. *IAQ devices*: Greenheck. *Indoor lighting*: Axis Lighting, Bega, Columbia Lighting, Con-Tech Lighting, G.E. Lighting Systems, Hubbell Lighting, Kim Lighting, Kurt Versen, Lithonia Lighting, Louis Poulsen, Peerless, Zumtobel. *Insulation*: Firestone, Knauf, Owens Corning. *Kitchen equipment*: Cambro, Eagle Group, Everpure, Fischer, Hatco, Hobart, Lakeside, NuTone, Southbend, Thermo-Kool, Traulsen. *Laundry equipment*: Fiat. *Lockers*: DeBourgh, List Industries, Superior Lockers. *Locks*: Schlage. *Markerboards*: Polyvision. *Movable partitions/walls*: USG. *Other*: American Flagpole, Draper, Peerless. *Paint*: Pittsburgh Paints. *Physical-education flooring*: Action Floor Systems, Everlast, Herculan Sports Surfaces. *Roofing*: Firestone Metal Products, GAF. *Science furniture*: Fisher Hamilton, Jamestown Metal Products. *Scoreboards/Clocks*: Fair-Play Scoreboards. *Signage*: ASI. *Washroom accessories*: Bradley, Haws. *Washroom fixtures*: Church, Delta, Kohler, Sloan, Zurn. *Washroom/shower partitions*: Capitol Partitions, Comtec. *Waste receptacles*: Rubbermaid. *Windows*: Moduline. *Wire management*: Whirlwind, Wiremold.

STV

225 Park Ave. South, Fifth Floor
New York, NY 10003
212-614-3346

Montgomery County Community College, Advanced Technology Center ....p. 216
No supplier information available.

THA Architects Engineers

817 E. Kearsley St.
Flint, MI 48503
810-767-5600

Deira International School, Campus Master Plan .... p. 324
No supplier information available.

TKDA

444 Cedar St.
St. Paul, MN 55101
651-292-4532

Gustavus Adolphus College, Stadium and Hollingsworth Field .... p. 261
Bleachers/Grandstands: Southern Bleacher Co. *Brick/Masonry*: Anchor Rockforce, Glen-Gery, Mankato Brick. *Carpet*: Shaw. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Elevators*: Minnesota Elevator. *Physical-education flooring*: Mondo. *Scoreboards/Clocks*: Daktronics.

TMP Associates, Inc.

1191 W. Square Lake Road
Bloomfield Hills, MI 48302
248-338-4561

Birmingham Elementary School Upgrades .... p. 296
No supplier information available.

Treanor Architects, PA

110 McDonald Drive, Suite 192
Lawrence, KS 66044
785-842-4858

University of Arkansas, Sigma Nu.. p. 262
Brick/Masonry: Northwest Cast Stone. *Cabinets*: Nevamar. *Carpet*: Design Weave, J&J Commercial Carpet. *Ceilings*: USG. *Ceramic tile*: Dal-Tile. *Chalkboards*: Best Rite. *Doors*: Ceco. *Elevators*: Otis. *Fire/life-safety systems*: 3M, Tyco. *Flooring*: American Olean. *HVAC control devices*: Johnson Controls. *Indoor lighting*: LSI. *Insulation*: Dow Chemical, Owens Corning. *Other*: Petersen Aluminum. *Paint*: Pittsburgh Paints. *Roofing*: Tamko. *Security systems*: Knox. *Washroom accessories*: American Specialties. *Washroom fixtures*: Moen. *Washroom/shower partitions*: Lasco. *Windows*: Manko.

University of Kansas Medical Center, Kansas Life Sciences Innovation Center.. p. 263
Brick/Masonry: Cloud Ceramics, Enterprise Precast, Fordyce. *Cabinets*: Fisher Hamilton. *Carpet*: Karastan, Milliken. *Ceilings*: Armstrong World Industries. *Drinking fountains*: Haws. *Elevators*: Otis. *Fire/life-safety systems*: Honeywell, Tyco. *Flooring*: Desco. *HVAC control devices*: Honeywell, Phoenix Controls. *HVAC units*: Bell & Gossett, Greenheck, Trane. *Movable partitions/walls*: Modernfold. *Paint*: Sherwin-Williams. *Science furniture*: Fisher Hamilton. *Windows*: EFCO. *Windows*: Viracon.

TR,i Architects

8251 Maryland Ave., Suite 300
St. Louis, MO 63105
314-726-9990

Hazelwood East Middle School, Conversion Phases I and II .... p. 297
ADA/compliance equipment: GamCo. *Cabinets*: Wilsonart. *Carpet*: Interface. *Ceilings*: Chicago Metallic, MSG. *Ceramic tile*: Dal-Tile. *Door hardware*: Schultz. *Doors*: Schultz. *Draperies/Blinds*: Draper. *Emergency lighting*: Cooper Lighting. *Flooring*: Armstrong, Forbo, Roppe. *HVAC control devices*: Alerton. *HVAC units*: Addison. *Indoor lighting*: Delray, Lite Control, Louis Poulsen. *Library/media center furniture*: Bretford. *Lounge furniture*: Quaker, Studio Q. *Markerboards*: Golterman, Sabo. *Office furniture*: HON. *Paint*: Sherwin-Williams. *Plumbing*: Mueller. *Roofing*: Versico. *Washroom fixtures*: Eamax, Elkay, Kohler, Pro Flo, Sloan. *Windows*: Metroppli Luccplan, Vistawall.

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Lehigh University, Lamberton Hall .... p. 298
Carpet: Mohawk. *Ceramic tile*: American Olean. *Door hardware*: Bommer, Hager, Rockwood, Schlage. *Doors*: Mohawk. *Drinking fountains*: Elkay. *Elevators*: Schindler. *Fire/life-safety systems*: Kohler. *Flooring*: Forbo. *HVAC control devices*: Siemens. *Indoor lighting*: Con-Tech, Cooper, Hubbell, Infinity, Lucifer. *Insulation*: Sarnafil. *Locks*: Schlage. *Paint*: Benjamin Moore. *Roofing*: Sarnafil. *Washroom accessories*: American Specialties, Bradley. *Washroom fixtures*: Elkay, Fiat, Kohler, Optima, Sloan, TruBro. *Washroom/shower partitions*: Comtec.

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Morris-Union Jointure Commission, Developmental Learning Center-Warren .... p. 266

Athletic equipment, Bleachers/Grandstands: Porter. *Cabinets*: Northeast Interior Systems. *Cafeteria furniture*: Trendway. *Card systems*: Locknetics. *Carpet*: Collins & Aikman. *Ceilings*: Armstrong, Rulon. *Ceramic tile*: Crossville, Dal-Tile. *Chalkboards*: Newline. *Childcare furniture*: Trendway. *Classroom furniture*: Trendway. *Clocks/Time management*: Kronos, Sampling. *Communications systems*: Telcor. *Computer furniture*: Trendway. *Door hardware*: Best. *Doors*: Graham. *Draperies/Blinds*: Pella. *Elevators*: Schindler. *Fire/life-safety systems*: SimplexGrinnell. *Flooring*: Armstrong, Johnsonite. *HVAC control devices*: Carrier. *HVAC units*: Ahnexair, Carrier, Poolpak. *Indoor lighting*: Diversified, Gotham, Holophane, Lithonia Lighting. *Insulation*: Certainteed. *Laundry equipment*: Speed Queen. *Library/media center furniture*: Trendway. *Lockers*: Comtec. *Locks*: Best. *Lounge furniture*: Trendway. *Markerboards*: Newline. *Movable partitions/walls*: Moderco. *Office furniture*: Trendway. *Paint*: Benjamin Moore, Sherwin-Williams, Zolatone. *Physical-education flooring*: Dynamic Sports Flooring. *Playground equipment*: Park Structures. *Plumbing*: American Standard, Elkay. *Roofing*: CertainTeed, Hickman. *Scoreboards/Clocks*: Spectrum. *Skylights*: Kalwall. *Washroom accessories*: Bobrick. *Washroom fixtures*: American Standard. *Waste receptacles*: Bobrick. *Windows*: Pella.

VCBO Architecture, LLC

524 South 600 East
Salt Lake City, UT 84102
801-575-8800

Dixie State College of Utah, Russell C. Taylor Health Science Center ....p. 217
Auditorium/assembly furniture: American Seating. *Carpet*: Shaw. *Ceilings*: Armstrong. *Classroom furniture*: Edutek, Herman Miller, KI. *Communications systems*: Cisco. *Computers*: Dell. *Door hardware, doors*: Corbin Russwin, Osh Kosh. *Drinking fountains*: Elkay. *Elevators*: ThyssenKrupp. *Emergency lighting*: Lightolier. *Fire/life-safety systems*: Reliable Sprinkler Co. *Flooring*: Forbo, Mannington. *HVAC control devices*: Honeywell. *HVAC units*: Scott Springfield. *Indoor lighting*: Lightolier. *Insulation*: Certainteed. *Lockers*: Republic Lockers. *Lounge furniture*: Herman Miller. *Markerboards*: Polyvision. *Movable partitions/walls*: Modernfold. *Office furniture*: Herman Miller. *Paint*: Porter Paints. *Roofing*: Versico. *Science furniture*: Fisher Hamilton. *Skylights*: Kalwall. *Washroom accessories*: American Specialties. *Washroom fixtures*: Delta, Kohler, Moen, Sloan. *Windows*: Kawneer. *Wire management*: Systimax Cabling.

Gila Ridge High School................. p. 129
Athletic equipment: GearBoss. *Auditorium/assembly furniture*: Hussey Seating. *Bleachers/Grandstands*: Hussey Seating. *Cabinets*: Justrite. *Cafeteria furniture*: Prodigy Chair. *Carpet*: Lees. *Ceilings*: GAF. *Chalkboards*: Claridge. *Classroom furniture*: Prodigy Chair. *Clocks/Time management*: Dukane. *Communications systems*: Avaya. *Computers*: Hewlett Packard. *Door hardware*: Arcadia, Von Duprin. *Doors*: Arcadia, Von Duprin. *Drinking fountains*: Haws. *Elevators*: Schindler. *Emergency lighting*: Lightolier. *Fire/life-safety systems*: Notifier. *Hand-drying equipment*: Bobrick. *HVAC control devices*: Staefa. *HVAC units*: Carrier. *Indoor lighting*: Columbia, Kim Lighting, Lightolier. *Insulation*: Certainteed. *Kitchen equipment*: Bev-air, Blodgett, Hobart. *Laundry equipment*: Whirlpool. *Lockers*: Allmetal. *Markerboards*: Claridge. *Office furniture*: National Office Furniture. *Paint*: Sherwin-Williams. *Physical-education flooring*: Aacer Flooring. *Plumbing*: Kohler, Zurn. *Roofing*: GAF. *Science furniture*: Prodigy Chair. *Washroom accessories*: Gamco. *Washroom fixtures*: American Standard, Kohler, Zurn.

***Syracuse High School.............. p. 96-97**
Athletic equipment: Jayco. *Auditorium/assembly furniture*: Hussey Seating. *Bleachers/Grandstands*: Hussey Seating. *Ceramic tile*: Dal-Tile. *Chalkboards*: ADP Lemco. *Clocks/Time management*: Atomix. *Computers*: Dell. *Door hardware*: Medeco, Schlage, Von Duprin. *Drinking fountains*: Elkay. *Elevators*: Carson. *HVAC units*: Modine. *Indoor lighting*: G.E. *Insulation*: Dow Corning. *Lockers*: Republic. *Movable partitions/walls*: Won Door. *Paint*: Kwal. *Roofing*: Firestone. *Skylights*: Kalwall. *Washroom fixtures*: Bradley, Kohler.

Wallace Roberts & Todd, LLC

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Philadelphia, PA 19103
215-732-5215

Ursinus College, New Residence Hall ....p. 218
Brick/Masonry: Carolina Ceramics. *Carpet*: Lees. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Door hardware*: Corbin Russwin. *Doors*: Eggers. *Drinking fountains*: Elkay. *Elevators*: Schindler. *Flooring*: Armstrong. *HVAC control devices*: Edwards Valance System. *HVAC units*: Edwards Valance System. *Insulation*: Dow Corning. *Locks*: Corbin Russwin. *Paint*: MAB. *Plumbing*: American Standard. *Residence hall furniture*: Blockhouse. *Roofing*: Certainteed. *Windows*: Traco.

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816-283-3731

Merriam Park Elementary School .. p. 68
Athletic equipment: Aalco. *Brick/Masonry*: Cloud Ceramics, Endicott Clay Products. *Carpet*: Interface. *Ceilings*: Armstrong, National Gypsum. *Ceramic tile*: Dal-Tile, Mapei. *Clocks/Time management*: Bogen. *Communications systems*: Atlas, Bogen, Denon, Yamaha. *Computers*: Dell, Hewlett Packard. *Door hardware*: LCN, McKinney, Pemko, Schlage. *Doors*: Chem-Pruf, Graham, Special-Lite, Steelcraft. *Draperies/Blinds*: Bali. *Drinking fountains*: Elkay. *Elevators*: ThyssenKrupp. *Emergency lighting*: Dual Lite, Elcast. *Fire/life-safety systems*: Edwards Systems Technology. *Flooring*: Armstrong, Tnemec. *HVAC control devices*: Staefa. *HVAC units*: Engineered Air, Liebert. *Indoor lighting*: Holophane, Infinity, LSI, Williams. *Insulation*: Foamular, Owens Corning. *Kitchen equipment*: Beverage Air, Blodgett, Kolpak. *Library/media center furniture*: Brodart. *Markerboards*: Polyvision. *Movable partitions/walls*: Modernfold. *Paint*: Sherwin-Williams. *Physical-education flooring*: Shaw. *Playground equipment*: GT Impax. *Plumbing*: Charlotte Pipe. *Roofing*: Tamko. *Security systems*: Pelco. *Washroom accessories*: American Specialties. *Washroom fixtures*: Bradley, Chicago Faucets, Crane, Sloan. *Washroom/shower partitions*: All American Metal. *Windows*: EFCO.

Williamson Dacar Associates, Inc.

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727-725-0951

Raymond B. Stewart Middle School .... p. 87
Brick/Masonry: Holcum. *Cabinets*: Case Systems, Wenger. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Chalkboards*: Claridge. *Door hardware*: Hager, LCN, Pemko, Schlage, Von Duprin. *Doors*: Cross, Curries, Graham. *Drinking fountains*: Oasis. *Emergency lighting*: Isolite. *Flooring*: Armstrong, General Polymer. *Hand-drying equipment*: Bradley. *HVAC control devices*: Johnson Controls. *HVAC units*: Trane. *Indoor lighting*: Metalux. *Insulation*: Tailored Foam. *Markerboards*: Claridge.

Movable partitions/walls: Hufcor. *Paint*: Porter. *Plumbing*: American Standard. *Roofing*: Bemo. *Washroom accessories*: Bradley. *Washroom fixtures*: American Standard. *Windows*: Winco.

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Rich South High School, Cafeteria Addition .... p. 264-265
Brick/Masonry: Advanced Cast Stone, Bricks, Inc. *Cabinets*: LSI. *Carpet*: Mohawk. *Ceilings*: Armstrong, USG. *Ceramic tile*: Dal-Tile. *Door hardware*: Hager, LCN, Schlage, Von Duprin. *Doors*: Eggers, Steelcraft. *Drinking fountains*: Elkay. *Fire/life-safety systems*: SimplexGrinnell, Viking. *Flooring*: Tarkett. *HVAC units*: Trane. *Insulation*: Johns Manville. *Kitchen equipment*: Alto Shaam, Champion, South Bend, Victory. *Lockers*: Lyon. *Markerboards*: Claridge. *Paint*: Benjamin Moore, Sherwin-Williams. *Roofing*: Firestone Building Products. *Security systems*: Pelco. *Washroom accessories*: Bradley. *Washroom fixtures*: American Standard, Bradley. *Washroom/shower partitions*: Metpar. *Windows*: Kawneer.

Wittenberg, Delony & Davidson Architects, Inc.

**400 W. Capitol, Suite 1800
Little Rock, AR 72201
501-376-6681**

University of Arkansas for Medical Sciences, Education West Building..p. 319
Auditorium/assembly furniture: KI. *Brick/Masonry*: Acme Brick: Endicott. *Carpet*: Lees. *Doors*: Eggers, Kawneer. *Elevators*: ThyssenKrupp. *Flooring*: Algoma Hardwoods. *HVAC control devices, units*: McQuay. *IAQ devices*: American Air Filter. *Markerboards*: ASCO Hardware. *Movable partitions/walls*: Modernfold. *Other*: Conwed, Landscape Forms. *Paint*: Sherwin-Williams. *Skylights*: Imperial.

Wold Architects and Engineers

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St. Paul, MN 55102
651-227-7773**

Shakopee High School .... p. 130
Athletic equipment: Performance Sports Systems. *Auditorium/assembly furniture*: Irwin. *Bleachers/Grandstands*: Interkal. *Brick/Masonry*: Endicott Clay Products. *Cafeteria furniture*: KI. *Carpet*: Mohawk. *Ceilings*: USG. *Ceramic tile*: American Olean, Crossville. *Classroom furniture*: Virco. *Computer furniture*: KI. *Door hardware*: Stanley, Von Duprin. *Doors*: Curries, Marshfield. *Drinking fountains*: Elkay. *Elevators*: Minnesota Elevator, ThyssenKrupp. *HVAC units*: Haakon. *Library/media center furniture*: Brodart, KI, Worden. *Lockers*: DeBourgh, Penco. *Locks*: Primas, Schlage. *Lounge furniture*: HON. *Markerboards*: Steelcase. *Multipurpose areas furniture*: Herman Miller. *Office furniture*: HON, KI. *Paint*: Sherwin-Williams. *Physical-education flooring*: Action Floor Systems. *Roofing*: Genflex. *Science furniture*: Lyon, Virco. *Skylights*: Kalwall. *Washroom accessories*: Bobrick. *Washroom fixtures*: American Standard, Sloan. *Washroom/shower partitions*: Santana. *Windows*: EFCO.

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Dallas, TX 75251
214-750-0077**

Brown Middle School .... p. 90
Athletic equipment: Specialty Supply. *Bleachers/Grandstands*: Sturdi Steel. *Brick/Masonry*: Acme Brick. *Cabinets*: Terryll Architectural Woodwork. *Carpet*: Patcraft. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Door hardware*: Sargent. *Doors*: VT Industries. *Draperies/Blinds*: Capitol Blind & Drapery. *Drinking fountains*: Elkay. *Elevators*: ThyssenKrupp. *Emergency lighting*: Genlyte Thomas. *Fire/life-safety systems*: Master Sound Co. *Flooring*: Armstrong. *IAQ devices*: MIINC. *Indoor lighting*: Genlyte Thomas, LSI. *Insulation*: Owens Corning. *Library/media center furniture*: Maco. *Lockers*: Penco. *Markerboards*: Newline. *Other*: Concord Industries. *Paint*: Sherwin-Williams. *Roofing*: Berridge. *Scoreboards/Clocks*: Specialty Supply. *Washroom accessories*: Gamco. *Washroom fixtures*: Bradley. *Windows*: Kawneer. *Wire management*: Leviton.

Dr. James P. Terry Middle School.. p. 91
Athletic equipment: Draper. *Bleachers/Grandstands*: Irwin Seating. *Brick/Masonry*: Arriscraft, Interstate Brick. *Cabinets*: Wenger. *Carpet*: Bigelow. *Ceilings*: Armstrong, Hunter Douglas. *Ceramic tile*: Dal-Tile. *Door hardware*: Sargent. *Doors*: VT Industries. *Draperies/Blinds*: Bali, MechoShade. *Drinking fountains*: Elkay. *Emergency lighting*: LSI. *Flooring*: Armstrong. *Hand-drying equipment*: Worib. *HVAC control devices*: Enviro-Matic Systems. *HVAC units*: Carrier. *Indoor lighting*: LSI. *Insulation*: Dow Corning. *Kitchen equipment*: G.E., Thermo-Kool, Traulsen. *Library/media center furniture*: Tesco. *Lockers*: List Industries. *Markerboards*: Texas Chalkboard. *Other*: Dukane. *Paint*: Sherwin-Williams. *Physical-education flooring*: Action Floor Systems. *Plumbing*: Elkay, Kohler. *Roofing*: Johns Manville, Petersen Aluminum. *Science furniture*: Advanced Lab Concepts. *Scoreboards/Clocks*: Daktronics. *Signage*: Ark Ramos, Gemini. *Skylights*: Naturalite. *Washroom accessories*: Bobrick. *Washroom fixtures*: Bradley. *Washroom/shower partitions*: Bobrick. *Windows*: Manko.

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Moorhead, MN 56560
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Aurora Elementary School............. p. 70
ADA/compliance equipment: American Specialties. *Athletic equipment*: Porter. *Bleachers/Grandstands*: Irwin. *Brick/Masonry*: Hebron Brick. *Cabinets*: Wilsonart. *Carpet*: Mannington, Shaw. *Ceilings*: Armstrong. *Ceramic tile*: American Olean. *Door hardware*: Hager, Ives, LCN, Schlage, Von Duprin. *Doors*: Eggers. *Draperies/Blinds*: Levelor. *Drinking fountains*: Elkay, Halsey Taylor, Haws. *Emergency lighting*: Honeywell. *Fire/life-safety systems*: Allied, Kennedy, SimplexGrinnell. *Flooring*: Forbo, Tarkett. *HVAC control devices*: Price, Titus, Trane. *HVAC units*: Carrier, McQuay, Trane. *IAQ devices*: Trane. *Indoor lighting*: Invue, Shaper. *Insulation*: DuPont. *Lockers*: Republic Storage Systems. *Locks*: Schlage. *Markerboards*: Claridge. *Other*: Draper. *Paint*: Sherwin-Williams. *Physical-education flooring*: Mondo America. *Roofing*: Centria, Firestone. *Security systems*: Honeywell. *Signage*: Best Mfg. *Washroom accessories*: American Specialties. *Washroom fixtures*: American Standard, Crane, Kohler, Toto. *Washroom/shower partitions*: Global Steel Products. *Windows*: EFCO. *Wire management*: Square D, Wiremold.

Sheyenne Ninth Grade Center ......p. 131
ADA/compliance equipment: American Specialties. *Athletic equipment*: Porter. *Bleachers/Grandstands*: Irwin Seating. *Brick/Masonry*: Hebron Brick. *Cabinets*: Pionite. *Carpet*: Mohawk. *Ceilings*: Armstrong. *Ceramic tile*: Crossville, Dal-Tile. *Door hardware*: Hager, Ives, LCN, Schlage, Von Duprin. *Doors*: Eggers. *Draperies/Blinds*: Levelor. *Drinking fountains*: Halsey Taylor. *Elevators*: Thyssen. *Emergency lighting*:

Honeywell, Locknetics, Lowell, Pelco. *Fire/life-safety systems*: Mueller, SimplexGrinnell. *Flooring*: Forbo. *Hand-drying equipment*: World Dryer. *HVAC control devices*: Johnson Controls. *HVAC units*: Lattner, McQuay, Tramont, Trane. *IAQ devices*: Trane. *Indoor lighting*: Advance, Howard, Osram Sylvania. *Insulation*: Dupont. *Lockers*: Debourgh. *Locks*: Schlage. *Markerboards*: Claridge. *Other*: Draper. *Paint*: Sherwin-Williams. *Physical-education flooring*: Connor Sports Flooring. *Roofing*: Centria, Firestone. *Scoreboards/Clocks*: Daktronics. *Security systems*: Honeywell, Locknetics, Lowell, Pelco. *Signage*: Best Mfg. *Washroom accessories*: American Specialties. *Washroom fixtures*: American Standard, Kohler. *Washroom/shower partitions*: Global Steel Products. *Windows*: EFCO. *Wire management*: Square D, Wiremold.

ZMM, Inc., Architects & Engineers

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Charleston, WV 25302
304-342-0159

Erma Byrd Center for Public Higher Education .... p. 219

Auditorium/assembly furniture: Irwin. *Brick/Masonry*: Belden Brick, Peerless Block. *Cabinets*: Case Systems. *Carpet*: Lees. *Ceilings*: Armstrong. *Ceramic tile*: American Olean. *Classroom furniture*: Haworth, KI. *Door hardware*: Sargent. *Doors*: Algoma. *Draperies/Blinds*: Draper. *Flooring*: Forbo, Fritztile. *HVAC control devices*: Invensys. *HVAC units*: York. *Indoor lighting*: Lithonia, Peerless. *Insulation*: Owens Corning. *Library/media center furniture*: Haworth, KI, Lacasse. *Lounge furniture*: Haworth. *Markerboards*: Platinum Visual. *Movable partitions/walls*: Inscape. *Office furniture*: Haworth, KI. *Paint*: Sherwin-Williams. *Roofing*: Firestone. *Science furniture*: Sheldon Systems. *Signage*: Vista Systems. *Washroom accessories*: Bradley. *Washroom/shower partitions*: Comtec. *Waste receptacles*: United. *Windows*: YKK.

Zyscovich Architects

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Miami, FL 33132
305-372-5222

Glades Middle School .... p. 92

Athletic equipment: Jaypro. *Bleachers/Grandstands*: Hufcor. *Cabinets*: Wilsonart. *Carpet*: Collins & Aikman. *Ceilings*: Armstrong. *Ceramic tile*: Dal-Tile. *Door hardware*: LCN Closers, Monarch, Von Duprin. *Doors*: Lambton Doors. *Draperies/Blinds*: Graber. *Drinking fountains*: Elkay. *Elevators*: ThyssenKrupp. *Emergency lighting*: Dual Lite. *Fire/life-safety systems*: Fire Control Instruments, Larsen's. *Flooring*: Armstrong, Mannington. *Hand-drying equipment*: Gamco. *HVAC control devices, units*: Trane. *Indoor lighting*: Columbia, Hubbell Lighting, Prescolite, Spaulding. *Kitchen equipment*: Bally, Gaylord, Groan, Hobart. *Lockers*: List Industries. *Locks*: Schlage. *Markerboards*: Claridge. *Movable partitions/walls*: Hufcor. *Paint*: MAB. *Physical-education flooring*: Taraflex. *Plumbing*: Elkay. *Roofing*: GAF. *Science furniture*: Campbell Rhea. *Scoreboards/Clocks*: JayPro. *Washroom accessories*: Gamco. *Washroom fixtures*: American Standard, Falcon Waterfree. *Washroom/shower partitions*: Santana.

Village Oaks Elementary School .. p. 71

Carpet: Mohawk. *Ceramic tile*: Dal-Tile. *Elevators*: Otis. *Flooring*: Armstrong. *Insulation*: Dow, Owens Corning. *Movable partitions/walls*: Hufcor. *Paint*: Sherwin-Williams. *Washroom accessories*: Bradley.

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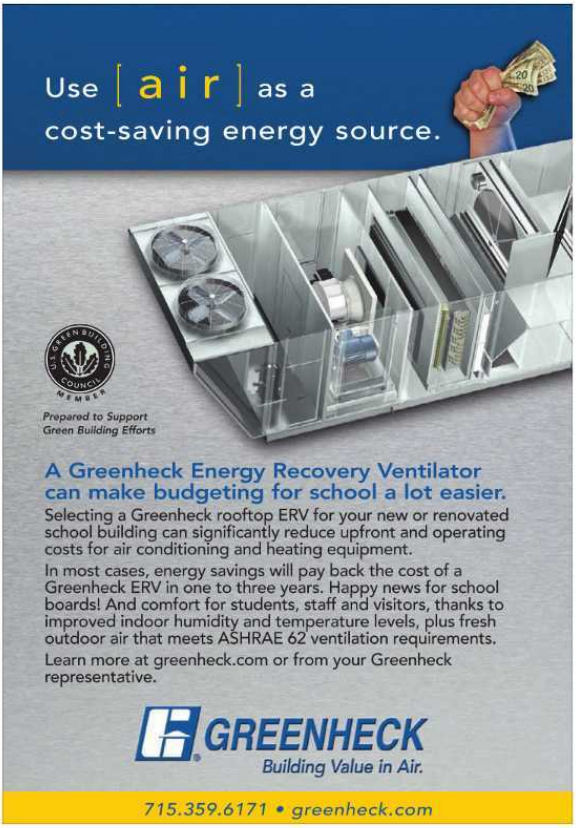
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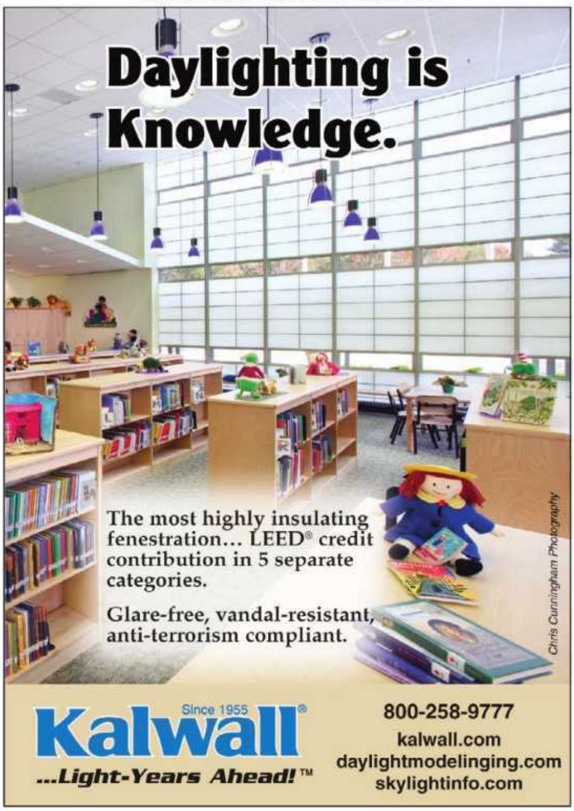
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